The Journal OF THE FLORIDA MEDICAL ASSOCIATION

Vol. XLIII MAY, 1957 No. 11

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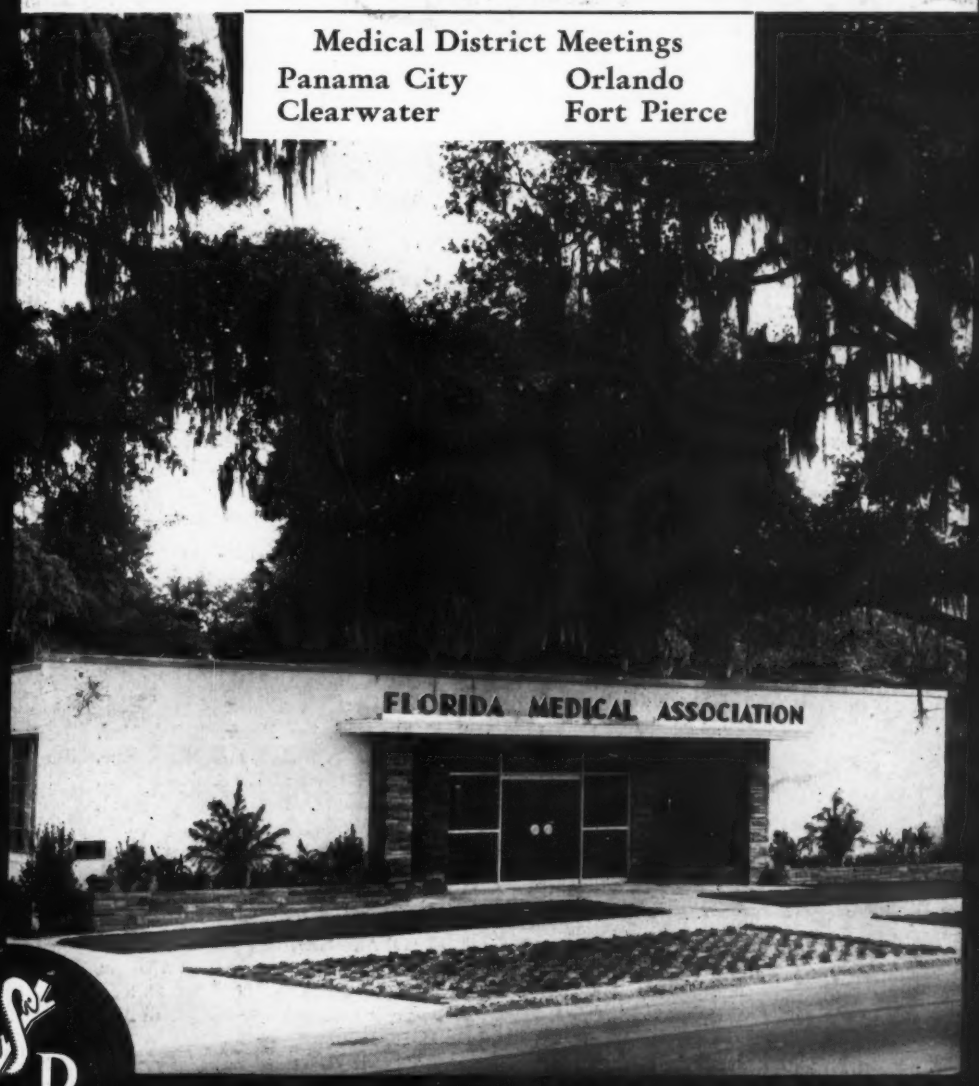

OFFICIAL PUBLICATION OF THE
FLORIDA MEDICAL ASSOCIATION

CLINICAL EXPERIENCE INDICATES FEWER RESISTANT STAPHYLOCOC

CHLOROMY

As clinical reports on resistance of common pathogens to antimicrobial therapy gain increasing prominence,[1-5] need for broad-spectrum antibiotic therapy to which resistance is less likely to develop becomes even more apparent. Particularly troublesome are the staphylococci, which often fail to respond not only to commonly used antibiotic therapy but also to agents more recently introduced.[6-10]

CHLOROMYCETIN (chloramphenicol, Parke-Davis) has maintained most of its original effectiveness against strains of staphylococci and against other sensitive pathogens.[2-4,11-15] "The fact that so few strains were found to be resistant to chloramphenicol [CHLOROMYCETIN] made it possible for the clinicians to turn to this antibiotic when such a large proportion of strains was observed to be highly resistant to the other commonly used antibiotics."[2]

CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

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VOLUME XLIII, No. 11 • *May, 1957*

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Published monthly at Jacksonville, Florida. Price $5.00 a year: single numbers, 50 cents. Address Journal of Florida Medical Association, P.O. Box 2411, 735 Riverside Ave., Jacksonville 3, Fla. Telephone EL 6-1571. Accepted for mailing at special rate of postage provided for in Section 1103. Act of Congress of October 3, 1917; authorized October 16, 1918. Entered as second-class matter under Act of Congress of March 3, 1879, at the post office at Jacksonville, Florida, October 23, 1924.

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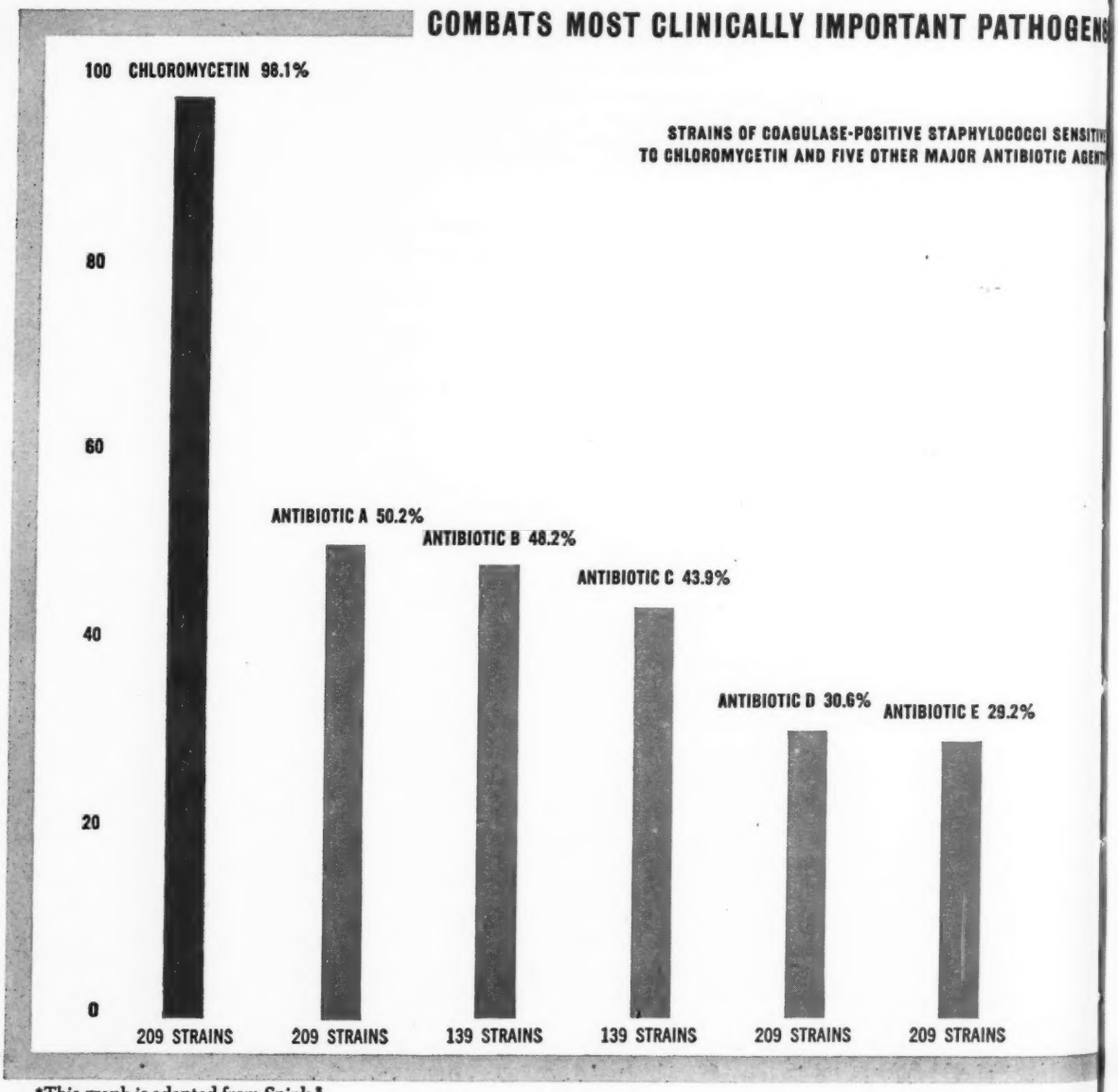

*This graph is adapted from Spink.[2]

The Journal of The Florida Medical Association
PUBLISHED MONTHLY

Volume XLIII | Jacksonville, Florida, May, 1957 | No. 11

Ulcerative Proctitis

THOMAS E. MCKELL, M.D.
TAMPA

That form of chronic ulcerative colitis of unknown cause and limited to the rectum or to the rectum and lower sigmoid colon is the topic of this discussion. Amebic and bacillary dysentery infections, drugs, factitial agents and other causes which may produce an inflammatory reaction in this area were eliminated by adequate studies in all cases discussed.

Clinical papers on idiopathic ulcerative colitis are apt to be devoted largely to the severely ill patient whose care demands the utmost skill in management of nutrition, antibiotics, psychotherapy, electrolyte balance and adrenocorticotropic agents, and judgment as to when surgery may be necessary. In more comprehensive reviews mention is made that mild forms of the disease confined to the lowest part of the bowel are seen, and that these may comprise a large part of the total cases diagnosed. Bargen[1] reported this group representing 20 per cent of the total, but others have observed that it represents as high as 39 per cent.[2] An even more startling figure is given by Steele and Brown,[3] who tabulated the results of 1,500 routine proctosigmoidoscopic examinations. They found three cases which were classified as typical ulcerative colitis, but an additional 40 cases with pinpoint ulcerations which they believed represented early or mild ulcerative colitis.

The wide variations in incidence are hard to explain. It has been noted that the disease is less prevalent in the warmer areas of the United States,[4] but such variations would seem to be outside any possible climatic difference. Some authors[5,6] have described a benign lesion which they classify as "idiopathic granular proctitis" separate and distinct from true chronic ulcerative colitis. Such an entity might explain some of the high incidence of proctitis noted. The difficulty with this hypothesis is that in none of their descriptions of the lesion or accounts of its clinical course is offered a means of differentiating it from the localized form of ulcerative colitis which may not remain so benign.

Read before the Florida Medical Association, Eighty-Second Annual Meeting, Miami Beach, May 14, 1956.

Analysis of Series

All patients in the series presented were subjected to proctoscopic examination several times and had at least two stool examinations and cultures, a barium enema and whatever skin tests, roentgen examinations and other studies were necessary to rule out other cause for the lesion. Several were given amebicidal drugs with no benefit. A personality evaluation was attempted in each. It is noteworthy here that while I was in New Orleans, Dr. Sullivan, one of the pioneers in psychosomatic medicine, and I observed 14 patients and were not too impressed with any significant deviation from the normal. In the ones seen since I have been in private practice, six of the seven appeared to have a definitely abnormal personality pattern. I think the difference is that I have come to know these latter patients much better.

Table 1 contrasts the features of ulcerative proctitis and colitis and granular proctitis.

The presenting complaint of the patients under consideration was bleeding from the rectum. They might or might not have some increase in bowel frequency, but rarely was there any severe diarrhea. Some might even be constipated and note blood occurring only with the passage of a hard stool. Symptoms might be present intermittently or continuously for weeks, months or even years. My experience has been that systemic signs and symptoms such as fever, loss of weight, anemia, and an elevated white blood cell count or sedimentation rate did not occur except as portents of a spreading process which had or was about to remove the disease from the benign category. Physical examination was not helpful except with the proctoscope. Here one saw a mucosa which had not the normal, satiny sheen with its lacy network of tiny connecting vessels. Rather it was coarse and granular in appearance

Table 1. — Characteristic Features of Ulcerative Proctitis, Ulcerative Colitis and Granular Proctitis

	Ulcerative Proctitis	Ulcerative Colitis	Granular Proctitis (?)
Bleeding	+	+	+
Diarrhea	±	+	±
Systemic symptoms	0	+	0
Etiology	?	?	?
Clinical course	Usually benign	Severe	Always benign
Proctoscopic	Granular, friable	Same or worse	Granular, friable
Barium enema	—	+	—

and bled when wiped with a wisp of cotton. This process might be limited to a few inches of the rectum with the mucosa beyond entirely normal, or it might extend into the lower sigmoid. In the area affected there was total involvement with no intervening areas of normal mucosa. Edema was minimal, and if significant edema or gross ulceration began to appear, there was usually a more extensive upward involvement of the bowel. The barium enema revealed no damage above the lower portion of the sigmoid colon.

Now, if this were the entire picture of the disease, one might end here by simply pointing out that there is a rather benign ulcerative proctitis which one must recognize, but even if one cannot or does not do much about it, the patient will not suffer greatly.

It is unwise to accept such a view. In this series of 20 cases, there was a history of one or more previous severe attacks of colitis in four, with a typical toxic and protracted debilitating course. In addition, in three cases the initial process was indistinguishable from the one described, but after some weeks or months there suddenly developed a typical severe and extensive ulcerative colitis involving most of the large intestine (table 2). It has been generally recognized that this possibility may occur.[1,7] More specific means of treatment might spare the patient in such cases the severe form of this disease.

Table 2. — Ulcerative Proctitis, Severity

Total Cases	Previously Severe	Progressed to Severe
20	4 (20%)	3 (13%)

Treatment

As far back as 1946, after reading Dr. Borland's paper[8] on the treatment of milder cases of ulcerative colitis with long term and heavy sulfonamide doses, Dr. Sullivan and I, at the Ochsner Clinic, adopted his method of treatment in cases belonging in this category. We did not achieve quite as good results as he, but we did get some 70 per cent remissions with the sulfonamides and observed a few more beneficial results from Aureomycin. Even so, it required prolonged therapy at high dosage levels of the drug, not without some possibilities of toxicity. Our experience also was that frequent courses of the drug had to be given to keep the disease in remission.

In 1952, some time after beginning private practice in Tampa, I adopted the use of the adrenocorticotropic agents in the same type of case, having seen myself[9] and learned from others[10] of the good results sometimes observed with the use of these agents even in the severe forms of ulcerative colitis.

Seven cases have been seen in four years. Table 3 summarizes the results. In six, the patient was treated with ACTH, cortisone or Meticorten. One patient refused the use of these drugs because she was afraid of them. She has had five recurrences in a three and a half year period, whereas the total recurrences experienced by the other six numbered only three.

Table 3. — Results of Therapy in Seven Cases of Ulcerative Proctitis

Cases	Prior History (Years)	Effective Drug	Recurrence	Follow-Up (Years)	Significant Neurosis
1	0	Sulfonamides	1	4	Moderate
2	0	Cortisone	1	3.5	Severe
3	15	ACTH	1	2	Mild
4	7	Cortisone	0	1	Moderate
5	3	Cortisone	0	3	0
6	0.5	Meticorten	0	0.5	Moderate
7	7	?	5	3.5	Severe

In five of the six patients, the mucosa reverted to normal under treatment. In four of the five, this treatment was on an outpatient basis with relief occurring within a week and with the bowel mucosa appearing entirely normal within three weeks. One patient did not show improvement on cortisone; the white blood cell count rose to 19,000, and he was hospitalized. On ACTH a remission occurred within a week. Treatment with small doses was continued for another three weeks. He has had one slight recurrence since with no systemic signs or symptoms. This was promptly controlled with Meticorten.

Another patient was treated initially with cortisone, but there developed a severe respiratory infection some 36 hours later. The drug was

discontinued, and he could not be persuaded to resume treatment with it since he was convinced it had something to do with this infection. There was response, after several months, to treatment with sulfonamides. One minor recurrence about a year ago was successfully controlled with Meticorten in less than two weeks.

The dosage of cortisone usually was started at 100 mg. per day in four divided doses. This amount was gradually decreased after a few days, or as bleeding became less. Treatment with Meticorten was usually begun in dosage of 5 to 10 mg. four times daily. In the one case in which the use of ACTH was necessary, the patient was given 30 units of the gel daily for three days, and then the amount was gradually reduced. As an outpatient, he was given first 10 and later 5 units every other day.

Summary

Ulcerative proctitis is a relatively benign form of chronic ulcerative colitis. It must be closely watched and treated since it may become severe at any time.

Differentiation from the more severe form of chronic ulcerative colitis is chiefly through lack of systemic signs and symptoms and failure to demonstrate pathologic change above the lower portion of the sigmoid colon.

Sulfonamides have been found to be of value in its treatment, as had been reported earlier.

ACTH, cortisone and the other more recent derivatives of cortisone have been found to be highly effective in treatment.

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Discussion

Dr. Frank C. Bone, Orlando: I enjoyed Dr. McKell's paper and am glad that he has emphasized this mild, frequently undiagnosed form of chronic, nonspecific ulcerative colitis. I should like to be certain that he considers it a form of this disease and not a separate entity. As he has mentioned, the diagnosis can be made only on sigmoidoscopy, since examination by barium enema will usually give normal results. These patients often have formed stools, and the bleeding is attributed to hemorrhoids. Consequently, any patient who passes blood should be sigmoidoscoped. Not only will this lesion often be found, but polyps and carcinoma as well.

In a series of 112 patients with chronic, nonspecific ulcerative colitis, which I had the opportunity of studying several years ago, approximately 15 per cent had this form of the disease. Sixty-five of the group had serial barium enemas over a period averaging six years. In 20 per cent of this number there was roentgen evidence of progression of the extent of involvement of the colon; in 70 per cent there was no change in the areas of the colon involved, and in 10 per cent there was diminution in extent of the disease. Although in most of the patients with this disease there is no progression of the extent of involvement, there is involvement of virgin areas of the colon in enough patients to make physicians do all in their power to prevent this progression.

In any disease such as this, with spontaneous remissions and exacerbations, the evaluation of any form of therapy is indeed difficult. It has been my impression that the steroids will usually induce a remission in this disease, but aside from this effect they probably do not change the subsequent course of the disease. I should like to have Dr. McKell comment on this matter. His series would suggest otherwise, but for statistical purposes the number is small.

One of the best ways of evaluating the results of management is by serial sigmoidoscopy. More often than is usually realized, the appearance of the rectal mucosa will revert to normal. Dr. McKell noted this change in four patients. In our group, 41 per cent at one time or another had a perfectly normal rectal mucosa. This does not necessarily mean, however, that these patients will not have future recurrences of the disease. I would certainly agree with Dr. McKell that these patients should be treated vigorously and respectfully. I also believe that our most potent medical weapon at present is the steroids, and they should not be withheld. I usually treat such patients first, however, with diet, poorly absorbed sulfonamides, sedatives and antispasmodics. If after a short trial, insufficient improvement is noted, I use ACTH without further delay.

Dr. James L. Borland, Jacksonville: Dr. McKell's fine presentation illustrates the oft repeated but rarely appreciated basic tenet that the diagnosis of nonspecific ulcerative colitis really embraces many disease patterns. One major criticism of the current medical literature is that it fails to do that which Dr. McKell has done, mainly to classify properly the disease pattern that he is discussing and to use only comparable cases. I believe that much of the controversy that rages about the disease stems from the fact that often physicians are talking about different diseases. These cases that Dr. McKell has shown are not at all comparable to the hose pipe colons or to the diffuse highly toxic or hyperplastic bowels that are widely described in the literature. To attempt to apply any treatment or prognosticate, all by the same standard, is folly.

There is no question in my mind that, whatever the reason, there exists a geographic distribution in these diseases. A chronic ulcerative colitis of the type of the severe toxic, or hose pipe or hyperplastic types is rarely seen in the gastrointestinal clinic of the Duval Medical Center. As a matter of fact, between the years 1937 and 1941, no cases were seen in the clinic, although they were encountered in private practice. This is a large outpatient clinic, and during those years the proctoscopic and the gastrointestinal clinics were operated in one. I do not think such cases were being missed. The reason for their absence I do not know. I simply give the figures. There has been a slow increase in the years that have followed, but still it is unusual to see ulcerative colitis in this clinic.

In private practice the type described by Dr. McKell is the usual one, and I should like to emphasize again the criteria delineating this particular condition. We must restrict the classifications, or else we wander afield. The first criterion of this type is that there must be no general sign of disease or toxicity. This is important. I think that cases in which there have been severe breaks in the past history, or in which they eventually occur, are not properly classified. I have the feeling in my own mind that I can tell from the general history of the patient the type of the disease that is present, and I think this lack of toxicity is important in the prognosis.

The second criterion is that the disease must begin at the internal rectum and it must decrease and finally disappear before the upper limits of the sigmoidoscopic examination are reached. It is reasonable to assume, of course, that in some cases the disease will extend beyond the reach of the sigmoidoscope, but in that event one has no assurance that it does not extend higher and that it is not a separate disease. I think it is necessary, therefore, to adhere to this criterion.

Third, there must be no hyperplasia of tissue, pronounced contraction of the rectum, stricture, or, as Dr. McKell has mentioned, large ulcerations.

In summary, this type of ulcerative colitis is a simple benign granular proctitis which disappears as it goes upward, and as it heals, it heals from above downward. One may readily observe this type of spread and regression.

Do the acute phases in Dr. McKell's cases represent separate entities or not? I personally believe that they do and should not be included. My experience, without a large series but extending back to 1937, is that the various manifestations of ulcerative colitis as seen in Florida, at least in Duval County, are type-stable. We are now seeing, however, a queer type of ulcerative colitis, beginning in acute episodes indistinguishable from bacillary dysentery. They can be extremely acute; the lesions will disappear, then return again. Improvement occurs on antibiotics. They differ from those of bacillary dysentery in that they tend to reappear each spring, and the bowel is not entirely normal between the episodes. What they are I do not know, but it has long been believed that some cases of ulcerative colitis begin in bacillary dysentery. For instance, Dr. Hurst in the first World War saw patients gradually go from proved bacillary dysentery into ulcerative colitis of all types including these of proctitis. Dr. Hurst originally treated the lesions with antibacterial serum. Perhaps we are seeing now this type, and these acute cases of Dr. McKell could be these proctitises.

In setting out a plan of treatment for the individual case, consideration must be given to the thesis that ulcerative colitis is not one but many diseases. Certainly the response to treatment discloses a high degree of variability between individuals and a "successful series" may be obtained with almost anything. In a series of 50 consecutive cases treated with sulfonamides at high levels, I applied the principle discovered in bacillary dysentery that the sulfonamide level must be in excess of 12 and maintained there for a period of time. We had no trouble keeping up this therapy for as long as a month and then followed it with suppressive treatment. In all, the disease disappeared. Following my report of that series, I had two more cases in this country respond. I had no further response, however, to the sulfonamides following the publication of my report for two or three years, and I realized later that I was applying the treatment to different types of cases, such as hose pipe and those cases of diffuse granular nature, which do not respond in the same way. That has been the experience with all types of treatment of ulcerative colitis. You start, you have a series, the patients improve and then they do not anymore. The literature is full of successful treatments of ulcerative colitis which have then failed.

This variation may be due to the fact that we are not adequately classifying that of which we are speaking.

I am impressed by the use of cortisone in the particular type that Dr. McKell presents, but his results must be tempered by the observations just mentioned. There is, of course, good sound reason for the use of steroids, but there is some danger in my mind in the use of this therapy — not only the publicized dangers such as the induction of bacteremia, perforation, the development of resistance, and the advancement of infection, but the point that in this type the patients will gradually get well anyway. The thing to do is to use the least degree of treatment that is of benefit and follow the patient. In other words, instead of giving everything and treating intensively, one treats this type as little as possible and adds therapy only as it fails to improve. Whatever induces a recurrence the first time will induce a recurrence the second time if the same treatment is followed. Dr. McKell has found in the use of cortisone that it will greatly shorten the period of treatment. There is some question here, however, as to whether in the use of this drug one teaches the patient to take care of his particular disease.

I congratulate Dr. McKell on his paper. I have enjoyed it very much.

DR. DONALD F. MARION, Miami: I shall abuse the prerogative of the chair to report only this brief word or two about ulcerative proctitis as we see it here in our clinic at Jackson Memorial Hospital and as quite a number of us apparently more or less agree we see it in our private offices. The entity is real. You have been impressed, I am sure, by the reluctance to attempt to classify it too rigidly. Yet, we have also heard that without classification we are lost. It is a paradoxical situation. If you look into the rectum, there is no doubt whatever, whether you are experienced or relatively inexperienced, that you are looking at disease. When you follow the patients, however, sometimes for four, five or more years —it has been my privilege to follow a few of them for as long as 10 years, and I am sure Dr. Borland has followed some longer than that—you cannot help being tremendously impressed that you are looking at something extremely benign, like certain of the more benign forms of psoriasis possibly or even some of the more benign forms of recurrent atopic dermatitis or other types of allergic skin manifestations.

Naturally, someone has to mention allergy whenever you are dealing with a situation like this. So I shall mention it. Many persons take it extremely seriously, and one or two of them will tell you themselves that their rectal bleeding is ever so much more pronounced and noticeable after the use of certain food stuffs. Laziness alone, I think, is the major reason which prevents us from following through every case with the attempt to investigate food allergies in the creation not only of this odd ulcerative picture at the distal end of the gastrointestinal tract but possibly a picture not unlike it that you may see at the opposite end in the oral cavity. So there are certain similarities between some of these odd recurrent ulcerations, although they do not look the same and are not the same pathologically. The sequence of events, however, is so strikingly similar that frankly I am way up a tree about the possibilities of a similar etiology; the idea, however, is tempting.

Since of course the cases we have seen here in Dade County are for the most part extremely benign, I personally have grave doubts about the wisdom of treating the patients with corticosteroids. I am most reluctant to do so. As a matter of fact, I can think of only one case I personally have ever seen in which I know for sure the disease progressed to involve more of the colon. It has been my impression that in most of these cases the disease is limited to the rectum and limited there for all time. I do not say that it cannot progress. I do think that it is a variety of chronic ulcerative colitis, which, as you all know, is unfortunately a wastebasket term. We know nothing whatever about etiology, and all we are hoping to do at present is to learn more about the disease, as we have been doing for a generation or more. I am, however, interested in Dr. McKell's results, treating these patients with Meticorten particularly, and I am somewhat interested in his dosage—the implication that he has started with 100 mg. of cortisone. I wonder how long he has kept it up, and I wonder if there is such a thing as a maintenance dose that would be a small enough dose to be innocuous. With all these questions, Dr. McKell, I wonder if you would have any closing remarks that you would care to make?

Whiplash Injuries of the Spine

Lyle W. Russell, M.D.
MIAMI

With the incidence of whiplash injuries of the spine increasing proportionately with the number of automobiles on the streets and highways of this country, it is becoming more and more important for every doctor to be aware of the seriousness of what may seem to him at first to be a trivial injury. My observations in the course of examination and treatment of 150 patients with whiplash injuries of the spine during the past three years form the basis for this paper.

The majority of these injuries are caused by automobile accidents, and of these most are rear end collisions. Similar effects, however, can be produced by head-on or side collisions. A sudden acceleration of a standing or slowly moving car, or a deceleration of a rapidly moving car, produces a sudden movement of the head toward the direction of the applied force and then a recoil in the opposite direction. Because the lower thoracic and the upper lumbar regions are supported by the back of the seat, the cervical and upper thoracic regions receive the greatest damage and the lower lumbar region the next greater strain. The exact position in which the occupants of a car are sitting determines to some degree the extent and anatomic location of the spinal injury. If they are relaxed, without any warning of an impending crash, a mild impact can produce the same effect as a hard impact does when they have an instant of warning and the muscles tighten up to give a protective splinting of the spine. Thus it is impossible to judge accurately the injury to an occupant by the amount of damage to the car or by the distance which a standing car is pushed by another.

Pathology

No attempt will be made to describe in detail the pathology produced by the whiplash injuries since it has already been aptly described by many authors.[1-3] Suffice it to say that a sudden stretching of joint capsules, ligaments, muscles and nerve roots produces a varying amount of tearing of the tissues with hemorrhage and edema. Muscle spasm invariably follows in due time in all except the mild cases. Occasionally fractures are produced in the vertebrae, but they are the exception rather than the rule. When they do occur, they are found usually in the spinous processes or the bodies of the vertebrae. As the fibrous tissues heal, scar tissue is laid down among the normal fibers, thus resulting in a chronic fibrositis. In severe injuries the scar tissue formation may be so extensive as to give a permanent restriction of motion of the spine. In moderately severe injuries the scar tissue may not be dense enough to restrict motion, but may be a source of pain when any undue strain is exerted, since the tissues do not have normal elasticity. Initial irritation and edema around nerve roots frequently result in peripheral neuritis, and occasionally scar tissue around the nerve roots leaves a permanent peripheral neuritis. As has been pointed out by Jackson, herniation of an intervertebral disk rarely occurs in the cervical region, but it is not too uncommon in the lower lumbar region. In this series of 150 cases there were four cases of definite herniated disk in the lower lumbar region, but none in which there were symptoms sufficient to be particularly suggestive of a herniated disk in the cervical region.

Symptoms

The symptoms immediately following a whiplash injury are never so pronounced as they are from one to three days later. At first there is usually a somewhat stunned feeling, and there may be a vertigo. If the trauma is chiefly to the cervical and upper thoracic area, one or more of the following complaints may follow: headache; pain in the neck and upper part of the back; pain, numbness or tingling radiating down one or both arms; blurred vision; spots before the eyes; double vision; nausea; vomiting; nervousness and emotional instability. When a spasm develops in the cervical muscles, motion of the neck may be restricted in one or more directions. Downward pressure on the head often increases the pain in the neck while traction relieves it. Sensory disturbances and reflex changes are sometimes noted in the upper extremities.

Even though symptoms in the head, neck and upper part of the back may predominate, one must not overlook the lower portion of the back and the lower extremities. Usually the only

Read before the Florida Medical Association, Eighty-Second Annual Meeting, Miami Beach, May 15, 1956.

Fig. 1.—Roentgenogram showing a compression fracture of the body of the fifth cervical vertebra.

symptom is low back pain, and on examination spasm of the paravertebral muscles may be present. In those cases, however, in which protrusion of an intervertebral disk is produced, there is radiating pain down one or both legs with sensory disturbances and reflex changes. Muscle spasm often causes a tilting of the trunk toward one side and a flattening of the lumbar lordotic curve.

Roentgen Examination

Roentgenograms of the spine should be made a part of every examination of a whiplash injury, even though in most cases they appear normal. Occasionally a fracture may be produced in some portion of one or more vertebrae (fig. 1). A mild subluxation may sometimes be demonstrated, even with the head held erect, but forward flexion of the cervical spine will show it more clearly (fig. 2). Mention is often made on a radiologist's report of a straightening or reversal of the cervical lordotic curve on a lateral view. Unless one knows the exact circumstances under which the roentgenograms were made, it is my opinion that such a report proves nothing. It is possible for cervical muscle spasm to produce a straightening or even a reversal of the lordotic curve. At the same time it is possible for an uninjured person to have a similar roentgenogram if he voluntarily tilts his head slightly forward (fig. 3). Three lateral views, therefore, should be made whenever there is any doubt and should be made under the supervision of the examining doctor. One roentgenogram is made with the neck in flexion, one with the head as erect as the patient can hold it without producing increased pain, and one with the neck in hyperextension. If the second view shows a change in the normal curve, even though the third view shows restoration of a normal curve, it is thought that this is roentgen evidence of muscle spasm. Sometimes there may be a lordotic curve in one portion of the cervical spine and a straightening or a reversal of the curve in another portion, thus resulting in a so-called "S" curve (fig. 4). When these changes persist, even months after the injury, when muscle spasm has subsided, it is believed that they indicate a fibrosis or scar tissue formation in the muscles and ligaments which prevents restoration of the normal curve.

Myelograms are indicated in those cases in which there are persistent symptoms of a herniated intervertebral disk and when surgical treatment is contemplated. In the present series of cases studied, a myelogram was performed on only one patient suspected of having a fifth lumbar herniated disk, and it gave positive evidence which was later corroborated at the time of surgery. In the other three cases of herniated disks in the lumbar region of the spine the diagnosis was made on subjective and objective symptoms, and the patients were treated with a fair degree of success with conservative management; therefore, myelograms were not performed.

Treatment

Early initiation of proper treatment is an important factor in reducing the extent of disability. An appeal, therefore, is made to the family doctor, who is usually the first one to see a patient with a whiplash injury, not to dismiss him with an assurance that there is no serious injury, even

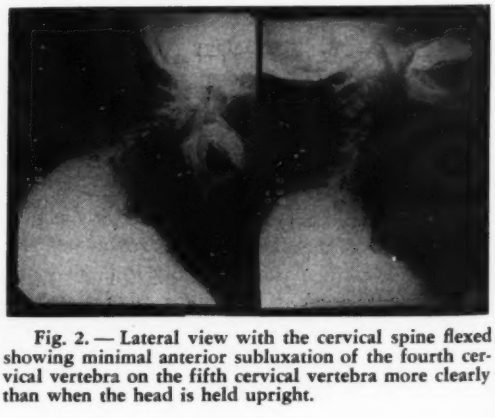

Fig. 2. — Lateral view with the cervical spine flexed showing minimal anterior subluxation of the fourth cervical vertebra on the fifth cervical vertebra more clearly than when the head is held upright.

Fig. 3. — Lateral view of the cervical spine of an uninjured person, showing how a slight forward tilt of the head can produce a straightening of the lordotic curve.

though he may have only minor complaints and no positive objective findings on first examination. It must be kept in mind that the maximal effects may not appear for from two to five days after the injury, and therefore the progress of each one must be carefully followed for several days before one decides that no treatment is necessary.

It is thought advisable to hospitalize all severely injured patients. When a patient is emotionally upset, has severe muscle spasm and pain, and a pounding headache, his condition is aggravated by having him ride back and forth to an office for treatment. In the hospital the patient can be kept at bed rest with head halter traction applied. The physiotherapist can apply soothing hot wet packs and massage to the painful spastic muscles. Intravenous Tolserol (100 cc. of 2 per cent solution in 400 cc. of saline) gives more effective muscle relaxation than any of the muscle relaxant drugs given orally. If low back and/or leg pains are present, pelvic or bilateral leg traction can be applied as well as head traction. Sedatives and analgesics are given as indicated.

When the acute symptoms have subsided, usually in one to two weeks, the patient can then be sent home and treatment continued in the office. A cervical collar, either felt or plastic, will serve to protect muscles from having more spasm and pain when the patient is walking or riding in a car. In the more severe cases, and especially those with fractures, the patient may have to wear a cervical brace for several weeks before wearing the collar. As soon as there has been sufficient improvement so that exercises can be instituted without increasing pain, neck support should be removed for short periods each day and the length of time gradually increased until the supports can finally be discarded. Lumbosacral corset supports are applied to those patients with severe low back complaints. Some form of traction apparatus should be set up in the home, either on the bed or suspended from an overhead position, so that the patient can use it intermittently throughout the day. Many patients prefer to sleep in traction for some time after leaving the hospital. A cervical pillow affords a more restful support for the neck.

Office physiotherapy may consist of one or more of the following: hot wet packs, diathermy, ultrasonic therapy, massage by hand or by one of the electronic muscle stimulation machines. Traction in the office is best administered by an intermittent motorized traction machine which can deliver up to 40 pounds pull on the head without becoming intolerable. Localized trigger points of muscle tenderness can be injected with Novocain. All of these measures are not carried

Fig. 4. — Roentgenogram showing the S-shaped curve present when the patient holds the head as erect as possible without increasing pain.

out simultaneously, but it is well to have a good armamentarium of treatment. If the patient is not improving rapidly enough for his satisfaction, he will not become so easily discouraged if he knows that his doctor can offer him another type of treatment that might get the desired results. If his doctor has nothing new to offer, then he will soon drift to another one or to a chiropractor.

Antispasmodic drugs are given orally although it is believed that none of the mephenesin drugs are nearly so effective by this route as when given intravenously. Analgesics, with narcotics when necessary, and sedatives must be given as required to control pain, nervousness and sleeplessness. In recent months the use of Miltown or Equanil has seemed to give good results in relieving anxiety and nervousness as well as having some effect on muscle spasm.

A most important part of the treatment of the patient as a whole is the consideration of the mental factor. The victim of a severe whiplash injury frequently has periods of emotional upset, and when the disability becomes prolonged, he is easily discouraged and depressed. It is in the treatment of the patient in this category that the family doctor plays an outstanding role, even though the patient may be under the active treatment of an orthopedist or a neurosurgeon. His condition must be explained to him in terms that he can understand. In order to keep him from being too discouraged when he finds that he has not recovered at the end of five or six weeks' time, he must be told from the beginning that it is not too unusual for his type of injury to require a long period of recovery. At the same time, in order to prevent him from becoming despondent about his future, he must constantly be given encouragement and reassured that in time he will improve. Any doctor who has treated many patients of this type has no doubt had experiences of being called at all hours of the day or night by a sobbing or near hysterical person who "just can't stand these pains and headaches any longer." A few moments of calm reassurance on the phone can usually persuade them to carry on a little longer.

Medicolegal Considerations

Since the majority of whiplash injuries are caused by automobile accidents, the legal aspects call for special consideration. Within a short time of the accident, the treating physician can expect to receive a request for a report to his patient's attorney and/or an insurance adjuster for a diagnosis and prognosis. After about two weeks it is usually possible for the doctor to have some idea of the prognosis even though it may be just a rough estimate. Within that time I try to classify the injury into one of three groups, namely:

1. The mild injuries, which require from one to six months to reach maximum recovery, and nearly all of which result in complete recovery.

2. The moderate injuries, which require from six to nine months to reach maximum recovery, and about half of which result in some degree of permanent disability.

3. The severe injuries, which require from 12 to 18 months to reach maximum recovery, and the majority of which have some degree of permanent disability.

In some of the severe injuries there may be some permanent restriction of motion of the spine or some neurologic changes that may be considered objective. For the most part, however, the disability rating must be based on subjective complaints, and therefore one must rely to a great degree on the honesty and integrity of the patient. The doctor who has known the patient before the accident and has had an opportunity to follow his progress subsequent to the injury is in a better position to express an opinion on this aspect than is the one who may be appointed by the court for a single examination. Realizing that an expected monetary gain may be the basis of many complaints, which would disappear after a court settlement, I sent questionnaires to 36 patients with predicted permanent disability who had been discharged after maximum recovery and financial settlements made. Of those who answered, all but one still had complaints similar to ones they had at the time of discharge.

The most common permanent complaints are a constant feeling of soreness and tightness of the neck and/or back, with increased pain caused by sudden twisting or jarring of the body or by remaining in one position for any length of time. Headaches and visual disturbances may be intermittent. The amount of disability depends much upon the occupation of the individual patient. For instance, one who is required to do much overhead work necessitating hyperextension of the neck, as in plastering or painting, may have a serious occupational disability; whereas an executive with the same severity of injury may have only occasional periods of discomfort without causing any loss of income-producing ability.

Summary

Whiplash injuries, although primarily damaging soft tissues in the cervical region, may also traumatize the lower part of the back and damage bone structures and intervertebral disks as well. Early adequate treatment reduces the extent of disability. It is the obligation of every doctor who has examined or treated a victim of whiplash injury to render an honest opinion in regard to the extent of any permanent disability so that a financial settlement can be reached which will be fair both to the patient and to the insurance company involved.

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Discussion

Dr. Jack W. Barrett, Miami: I want to thank Dr. Russell for asking me to comment on what I consider a most excellent review of this subject. In the way of emphasizing some of the points that he made, I think that certainly we do not want to judge the severity of a whiplash injury to the neck, for instance, on the basis of damage done to the automobile. It stands to reason, however, that the amount of damage to the vehicle in dollars and cents may be some index of the force of the impact, which certainly has some bearing on prognosis and treatment of the injury. In roughly the same period of time as covered by Dr. Russell's paper, which is a review of cases over about three years and some 150 in number, I have been cognizant of the fact that in my practice I, too, did not see surgical protruded intervertebral cervical disks. Most authors say that they have observed these surgical disk lesions rarely. Dr. Russell apparently has not seen a surgical cervical disk protrusion, and neither has Dr. Jackson of Dallas, who has a rather large series, although she says that they do occur, but rarely.

I think the comment on the roentgenograms of the cervical spine is something that we should all consider. Too many times our radiologic friends diagnose spasm and straightening of the spine from three films, an anteroposterior, a lateral, and an odontoid view. I believe that number is grossly inadequate to make a statement as to muscle spasm and straightening of the spine. I am speaking now of the cervical spine as regards alleged trauma and accidents. There should be at least three views taken laterally, the neutral lateral, flexion lateral and hyperextension lateral, together with the odontoid view, the anteroposterior view and, in many instances, oblique views before inference should be made as to the spasm and straightening. I also think it is important, as Dr. Russell stated, that the x-ray test be performed by the treating physician, or, if not the treating physician, which is sometimes most impractical, at least by a radiologist who is cognizant of your problem and with whom you have spoken before the roentgenograms are made. If you are interested in the mobility of the spine, before such information can be gained from the roentgenograms, certainly you have to know how they were taken, which is something that cannot be relegated to a technician. Before comments are made on spasm and tightening as evidenced by roentgenograms of the cervical spine, careful consideration should be given to these factors and sufficient roentgenograms are a must.

Dr. Frank O'Connell of Kingsport, Tenn., at one of the recent meetings of the neurosurgeons had a most interesting study. I will not go into detail concerning his study. It will suffice to say that 100 hospitalized patients with complaints not related to the neck, such as gallbladder disease and heart trouble, were subjected as a routine procedure to roentgen examination of the cervical spine. Roughly 70 per cent of the roentgenograms demonstrated abnormalities of the cervical spine, such as narrowing of the interspaces, osteoarthritic overgrowth, subluxation, and other deviations of a minor nature. He observed that the incidence of these abnormalities increased with age. So, again, I think we should be cautious in interpreting these changes on roentgenograms of the cervical spine following an accident. Certainly it is more common to have these changes in the cervical spine without an accident and without their being due to an accident. It would be most helpful, although impossible, if we only knew what the roentgen examination of the cervical spine was prior to the injury.

As to treatment, I would like to mention my pet peeve. I am sure that I will be taken to task for this statement. I think, however, that we are all guilty in that we put braces and collars on patients for spinal injuries too quickly and keep them in these contraptions too long. Each case has to be individualized; but if you decide that a collar or brace is necessary, it seems to me that the patient should use that collar for maybe the duration of the acute or subacute period. All too often we see patients coming in after nine or 10 months, or even a year or a year and a half, still wearing their collars. I believe that after that length of time those poor old muscles are starting to atrophy and we are further weakening the injured musculature. A brace or collar should be worn for a limited period. I am not in a position to say how long, but a few months may be all right, and a lesser time seems advisable. The other big factor about the collar that should be stressed is that too many times it is used to treat the emotional or mental aspect of this illness. When the patient is given a collar, it becomes a sign for the whole world to see indicating that the patient is suffering and has suffered. Under these circumstances, it becomes most difficult to wean the patient away from the collar.

Dr. George T. F. Rahilly, Fort Lauderdale: I wish to extend my thanks to Dr. Russell for the opportunity to review his paper well in advance of this meeting and also to discuss it.

I agree in great part with Dr. Russell's findings and comments and think his paper is a fine one. My only points of disagreement are as follows:

Dr. Russell states that the amount of damage to the automobile is not a particularly significant index of the trauma inflicted. I think it is reasonable to believe that minor accidents are almost invariably going to result in injuries in which a total recovery can be expected. On the other hand, major accidents in the presence of subjective complaints, even without many objective findings, are likewise productive of more severe injuries. This is reasonable, and these complaints should not be dismissed lightly.

I would like to agree at this point with one finding of Dr. Russell which I think needs emphasizing. The fact that people are not aware that they are about to be struck results in more damage to them than to those who are aware that an accident is coming. It is found that the greatest complaints by far are of those in the car that was struck rather than of those who were in the car which did the striking and were probably braced for the accident. In other words, the story that relaxed intoxicated persons never get hurt is not necessarily true, and relaxation is more of a prerequisite to a whiplash injury than bracing by voluntary muscular control.

It is my opinion that more of the pain caused in the chronic cases is due to nerve injury rather than to scar tissue in the capsule and muscle. Most scar tissue is painless, as we know from the severe injuries we see in limbs which do not usually result in painful extremities. The neck should be no exception. The pain is due to damage to the nerves themselves secondary to the actual bruise and hemorrhage in the nerves. Stiffness and scar-

ring in fascial, capsular, and muscle tissue resulting from these accidents, in the absence of previous osteoarthritis, can usually be worked out by good physical therapists as scar tissue usually can gradually be stretched.

I am inclined to think that there is a higher incidence of cervical disk protrusions than Dr. Russell found in his series. More cervical myelography would bear out this point.

Much of the damage done by these injuries, particularly in the low back, simply aggravates pre-existing asymptomatic disk degeneration, and these accidents are frequently the straw that breaks the camel's back. As we all know, over the age of 30, our intervertebral disks in the low back are degenerating spontaneously, and it does not take much to make them become troublesome.

Concerning x-ray evidence of subluxation in the cervical spine, the appearance of apparent anterior subluxation of one cervical vertebral body on the other is frequently physiologic and should not be emphasized too much to the patient or to his attorney. Many uninjured cervical spines in flexion x-rays show what appears to be pronounced anterior subluxation which is physiologic.

Concerning cervical collars and braces, I try to avoid their use because they tend to give the patient the idea that he has a terrible problem and that usually leads to increased desires for high financial awards and more anxiety neurosis. It likewise tends to limit the range of motion in the neck and allows scar tissue to tighten up which might, on the other hand, have remained looser if allowed a greater range of motion. I personally like to keep the patient moving his joints as much as is possible within reason during the recovery period to lessen ultimate limitation of motion.

In my opinion, permanent disability in these injuries is the exception. What damage there is usually consists of injury to nerve roots by disk or bony pressures, and the services of surgery to divide the second cervical nerve to lessen occipital neuralgia may be required. I have seen a few patients who had evidences of relatively intractable occipital neuralgia after one of these injuries who could be helped relatively simply by the technic that has been devised by Dr. Mayfield and reported at the last meeting of the Committee on Trauma of the American College of Surgeons.

Finally, I want to reiterate that I agree with most of Dr. Russell's report, which is comprehensive and instructive. By all means, get these patients under immediate and sympathetic treatment and do not tell them nothing can be done because much can be done to save them and yourself many a headache.

DR. RUSSELL, closing: I wish to thank Dr. Barrett and Dr. Rahilly for their kind words. I am sure we are not too far apart in our thinking. As far as the question of damage to the automobile is concerned, the reason I brought that fact up is that I have frequently had this happen to me. An attorney in attempting to get a higher rating will tell me: "This man's car has had $600 worth of damage. Surely he must be very badly injured." Often it happens that the man was not too badly injured at all. On the other hand, I have had insurance adjusters say: "This man had only $10 worth of damage to his car. How can he have any permanent injury?" It still can be possible. It is true though that in the majority of cases the harder the impact the greater the injury will be.

As far as braces and collars are concerned — I rarely use braces, but frequently use collars on the severely injured during the first few weeks or months — I, too, agree that they can be relied upon too greatly. On the other hand, I think that these patients are spared much needless suffering during the first few weeks if they are given that support. I do agree, however, that it is necessary to try to wean them away from it just as soon as possible and get them exercising even during the period they are wearing it part time, or have them remove it for periods for neck exercises.

As far as the cervical disk problem is concerned, perhaps we do not do enough cervical myelography, but I do agree with the writings of Dr. Jackson that the anatomy in the cervical region differs greatly from that in the lumbar region. I think that the cervical disks are relatively few, although it is possible we do miss some by not obtaining the cervical myelogram.

Nonpenetrating Abdominal Trauma

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Nonpenetrating abdominal trauma is often the most dramatic of surgical emergencies. At the same time, such injuries may be the most difficult of diagnostic problems. The finest clinical judgment of which the surgeon is capable must be exercised in the management of such cases. Unfortunately, closed abdominal trauma as the sole injury in a patient is the exception rather than the rule. Frequently, one's diagnostic acumen is taxed by the masking features of a concomitant wound of the head, chest or extremity. All too often, one's attention is diverted from the possibility of a closed abdominal wound, which subsequently contributes to the demise of the patient, because of the obvious head injury, crushed thorax, or fractured femur absorbing attention. All injured patients must be examined in an orderly fashion covering every region of the body. One must keep in mind a classification of the types of closed abdominal injury and examine each patient, no matter how trivial his injury, with that classification as a mental guide in diagnosis.

In rather broad but workable terms, there are three major categories of nonpenetrating abdominal trauma. Such injuries can give rise to clinical signs and symptoms associated with

I. Hemorrhage
II. Peritonitis
III. Neither hemorrhage nor peritonitis

Using this classification, one may list closed abdominal injuries producing trauma to or rupture of abdominal viscera as shown in table 1.

There are a few special points one must keep in mind in regard to both hemorrhage and peritonitis as they pertain to intra-abdominal injury.

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Table 1.—Classification of Closed Abdominal Injuries

I. Hemorrhage as Principal Manifestation
   1. Spleen
   2. Liver
   3. Kidney
   4. Pancreas
   5. Major blood vessels
   6. Retroperitoneal and preperitoneal hematoma associated with fracture of spine or pelvis

I. Peritonitis as Principal Manifestation
   1. Rupture of stomach
   2. Rupture of small or large intestine
   3. Rupture of retroperitoneal duodenum
   4. Rupture of urinary bladder
   5. Bile ducts, gallbladder and occasionally liver

III. Neither Peritonitis nor Hemorrage
   1. Rupture of diaphragm

Hemorrhage may occur rapidly and progress steadily to exsanguination. Here, of course, it is accompanied by all the classical manifestations of shock. Much more frequently, after an initial hemorrhage, clotting may occur, and the patient becomes temporarily stabilized with a relatively normal blood pressure, hemoglobin and vital signs. Subsequently, bleeding recurs, and if the diagnosis has not been made prior to this recurrence, the patient may well be lost. There is apparently a popular misconception that blood free in the peritoneal cavity causes hypoperistalsis or an adynamic ileus. This concept as far as it pertains to the reaction to intraperitoneal blood for the first 24 hours is wrong. Free blood, initially, acts as a stimulant to peristalsis. Hyperperistalsis as determined by auscultation is the rule rather than the exception.

In cases of ruptured spleen, uncomplicated by concomitant perforation of the bowel or stomach leading to peritonitis, I have yet to find peristalsis absent in the early stages. Hemorrhage into the peritoneal cavity, as well as severe hemorrhage into the thorax, retroperitoneal or preperitoneal areas, or massive hemorrhage into the thigh tissues with a fractured femur, causes an almost immediate rise in the white blood cell count to 14,000 or above. Often the initial laboratory examination of the blood in intra-abdominal hemorrhage will show a normal hemoglobin content and hematocrit reading, but the white blood cell count will be elevated. Only over a period time, possibly hours, will there be a drop in the hemoglobin content and hematocrit reading. Blood in the peritoneal cavity may give some manifestation of peritoneal irritation, but tenderness and spasm often are minimal. This response may well be due to the location of the blood. If it is trapped between coils of intestines or lies pooled high under the rib margin, there may be little irritation to the peritoneum of the anterior abdominal wall. Referred pain and tenderness to the shoulder region with hepatic and splenic injuries may or may not be present depending, again, upon whether or not blood is so located that it can cause irritation of the diaphragm with reflex pain referral. On occasion, I have seen ruptured spleens with massive intra-abdominal hemorrhage fail to demonstrate this phenomenon and subsequently observed its development after the patient was placed in mild Trendelenburg position, allowing blood to gravitate upward against the diaphragm. It may occasionally be produced by applying strong pressure over the left hypochondrium.

Peritonitis associated with a ruptured viscus may not appear initially. Once it is present, of course, the classical signs of tenderness, spasm, rigidity and adynamic ileus become manifest. There are several reasons why there may be a delay in signs from a perforated viscus:

1. The masking effect of shock
2. The masking effect of associated head or chest injuries
3. Temporary spasm of the bowel preventing leakage
4. Temporary omental seal

One must keep in mind the fact that there is a lag period between the contamination of the peritoneal cavity and the onset of peritonitis. This is especially true if noninfected bile is spilled. It is, however, also true with perforation of the bowel. One needs but to recall cases of appendicitis in which the appendix ruptured while the patient was en route to the hospital. Whereas previously there was pain, tenderness, and spasm, for a little while following the rupture the patient is painfree, and the abdominal examination gives negative results. The same sequence of events can and does occur on occasion with traumatic perforations.

Keeping in mind the points mentioned as regards hemorrhage and peritonitis, how does one go about establishing the diagnosis of an intra-abdominal injury? One must preface this phase of the discussion by stating emphatically that the diagnosis of closed abdominal injuries can rarely be made on a single diagnostic examination. Meticulous observation and repeated examinations made at frequent intervals offer the only certain method of proper diagnosis. In the examination of an injured patient one must follow an orderly plan of attack (table 2).

Table 2.—Steps in Diagnosis of Abdominal Injury

I. History
II. Physical Examination
III. Laboratory Studies
  1. Catheterized urinalysis
  2. Hemoglobin estimation, hematocrit reading and white blood cell count
  3. Blood typing and cross match
  4. Serum amylase
IV. Radiographic Studies
  1. Two or three position radiographs of the abdomen
  2. Intravenous pyelogram
  3. Cystogram (?)
V. Special Tests
  1. Abdominal tap(?)

I. History

Often a history is unobtainable, but if one can be obtained, the manner and type of injury may give valuable information. Rapid deceleration associated with automobile accidents or falling from some height is often associated with tears of the spleen and liver. A blow over the lower part of the thorax on the left side may cause splenic rupture. Crushing injuries such as occur when a patient is run over by an automobile or truck make one suspicious of perforation of a hollow viscus as well as splenic, renal or hepatic injury. A blow over the lower part of the abdomen in a patient who has been drinking may well cause perforation of a full bladder.

II. Physical Examination

1. INSPECTION.—On inspection, contusions of the wall of the abdomen or lower part of the chest may arouse suspicion. Bruises over the lower posterior portion of the chest are often a clue to the possibility of splenic rupture.

2. PERCUSSION.—Areas of abnormal gas shadows may be delineated on percussion, such as the obliteration of the usual area of liver dullness by an accumulation of air under the diaphragm from a ruptured stomach. Shifting dullness due to free blood in the peritoneal cavity may occasionally be elicited.

3. PALPATION.—On palpation, a localized area of tenderness, rigidity or spasm may be delineated. One must remember that fractured ribs may cause tenderness and some rigidity in the associated upper abdominal quadrant. Frequently a fractured femur will cause tenderness and some rigidity in both the upper and lower abdominal quadrant of the affected side. Local nerve block may be of help in differentiating between the findings in the local abdominal wall due to the fractured ribs and those due to some intra-abdominal lesion. Re-examination of a patient with a fractured femur subsequent to splinting and traction of the extremity may be of considerable help in differential diagnosis.

4. AUSCULTATION.—The presence or absence of peristalsis must always be noted; it serves as a base line for subsequent examination. As mentioned previously, absence of peristalsis suggests peritoneal contamination from a ruptured hollow viscus or a hematoma in the mesenteric root, whereas normal peristalsis or hyperperistalsis is frequently present with free intraperitoneal hemorrhage.

5. SHOCK.—The presence or absence of shock must be determined. This requires blood pressure, pulse and respiration determinations at 15 minute or half hour intervals. Two points are worthy of particular mention. Head injuries, except in the terminal stages, affect the vital signs in a manner directly opposite to the findings manifested in shock. With a head injury and increasing intracranial pressure the blood pressure rises, and the pulse slows down. All too often shock in an injured patient who has a head injury has been erroneously ascribed to that injury. It is of utmost importance to follow the rule that if a patient has a head injury and is in shock, one is obligated to find some other cause of the shock. Most frequently, the cause is intra-abdominal or intrathoracic hemorrhage.

The other factor to keep in mind in regard to shock is that blood loss, instead of giving an apathetic, listless state, is often associated with restlessness and hyperactivity. A restless, hyperactive injured patient with alcohol on his breath may not be intoxicated; he may be in impending shock from hemorrhage.

III. Laboratory Studies

1. CATHETERIZED URINALYSIS.—The volume of urine, or lack thereof, may give an indication of a perforation of the bladder. One can rule this possibility in or out by completely emptying the bladder and instilling a measured amount (200 ml.) of sterile physiologic saline and then withdrawing it. If less than the amount instilled is obtained, the possibility of a ruptured bladder is very real. This can be checked by a cystogram when the patient is being subjected to radiographic examination. Pelvic or lower abdominal trauma requires a cystogram. Gross blood in the urine, or microscopic evidence of red cells, suggests injury to the kidney or bladder.

2. HEMOGLOBIN DETERMINATION, HEMATOCRIT READING AND WHITE BLOOD CELL COUNT.—

The importance of the white blood cell count has been discussed previously. The hemoglobin and hematocrit determinations should be repeated frequently since the initial readings may be normal but become abnormal as bleeding continues or as delayed hemorrhage occurs.

3. Blood Typing and Cross Match.—If a closed abdominal injury is present, whole blood will be needed and may be needed urgently even though on the initial examination the patient appears in good condition.

4. Serum Amylase.—Repeated determinations may delineate pancreatic injury which cannot be established readily in any other manner.

IV. Radiographic Studies

1. Abdominal Radiographs.—While radiographs taken in three positions are desirable, it may be impossible to obtain a radiograph with the patient in the upright position to demonstrate fluid levels in the abdomen or free air, from a perforated viscus, under the leaf of the diaphragm. Radiographs taken in two positions, however, one with the patient in the supine position and the other with the patient in the right lateral decubitus position, can be obtained in most instances and may give sufficient information. The radiographic findings most commonly associated with ruptured spleen are enumerated in table 3.

Table 3.—Radiographic Findings Suggestive of Splenic Injury

1. Elevation of left hemidiaphragm
2. Pleural effusion (left)
3. Obliteration of splenic shadow
4. Increased density of shadow under left diaphragmatic dome
5. Progressively larger splenic shadow by serial studies
6. Serration of margin of greater curvature of stomach
7. Compression of stomach fundus
8. Downward displacement of cardiac end of stomach
9. Downward displacement of splenic flexure of colon
10. Psoas shadow obscured

2. Intravenous Pyelography.—While the patient is on the x-ray table, it is a simple matter to accomplish excretory urography. Failure of visualization of one kidney or extravasation of the dye into the perirenal area may indicate a lacerated kidney.

V. Special Diagnostic Tests

1. Abdominal Tap.—While many endorse an abdominal tap as a reliable test for determination of free blood in the peritoneal cavity, I have not employed it. In most cases, the diagnosis can be made without such a test. Although it apparently has caused no complication in the hands of those utilizing the method, I am not enthusiastic about the blind insertion of a needle into a cavity filled with intestinal loops. It has been my experience that in those cases in which there is only moderate bleeding, when one first enters the abdomen, no blood may be seen until the intestinal loops are disturbed and the blood pooled between the mesentery leaves is released. Finally, while an abdominal aspiration giving positive evidence is helpful, a negative result does not rule out the presence of free blood. A series of 10 such aspirations was carried out on the staff service of the Jackson Memorial Hospital on patients in whom the diagnosis of intra-abdominal hemorrhage had been made and who were to be subjected to an exploratory operation. In nine of the cases aspiration yielded blood. In one case the aspiration gave a negative result although subsequent exploration showed a considerable quantity of blood to be present.

Management of Intra-Abdominal Trauma

As I have mentioned previously, a high index of suspicion in regard to the presence of abdominal injury must be maintained in all cases of injury. Repeated examination of the patient and repeated laboratory tests must be accomplished frequently for a period of several hours. Even after a 12 hour period one must keep in mind that delayed hemorrhage, that is, hemorrhage occurring 48 hours after the initial injury with a definite latent period between bleeding episodes, occurs relatively frequently in splenic injuries.

If shock is present, it must be treated vigorously with whole blood. Plasma and dextran may be used initially until blood is obtained. While it is an accepted surgical principle not to start anesthesia or an operation while a patient is in shock, this principle is not applicable if the shock is due to active hemorrhage. In some instances it may be necessary to institute shock therapy and proceed immediately with an exploratory celiotomy.

A nasogastric tube should be inserted and the stomach evacuated early in the course of management. Gastric dilatation usually accompanies all severe injuries. The presence of this distention not only confuses the abdominal findings, giving pain and tenderness, but it is a real source of danger to the patient since regurgitation and aspiration often ensue.

Exploratory celiotomy is indicated in all cases in which the diagnosis of intra-abdominal injury is established or strongly suspected. An exploration

giving negative evidence is far better than a missed diagnosis. Often the decision to explore an abdomen is made more difficult because the patient has other severe trauma such as a head injury or a crushed chest. As a general rule. if definite intra-abdominal trauma is present, then abdominal exploration must be carried out, or the patient will die. The most difficult decision rests with those cases in which the patient has other extensive injuries and the diagnosis of intra-abdominal trauma is not clearcut. If the patient can be gotten into reasonable shape, it is my opinion that exploratory celiotomy should be carried out. If an unrecognized abdominal injury is present, it may tip the balance against the severely injured patient. As the patient's condition deteriorates, the abdominal injury may become more manifest, and at that point the patient may not withstand any procedure. It has been my experience that even the patient with severe head injuries tolerates abdominal exploration surprisingly well. While my exploratory operations giving negative results have been relatively few, those few patients with severe head injuries and a negative result from celiotomy, accomplished early in their hospital course, have progressed entirely satisfactorily. The same holds true for severe chest injuries. If one has a competent anesthesiologist well versed in endotracheal technics and with an adequate knowledge of respiratory physiology, in such cases the patient can tolerate an early abdominal exploration before the period when multiple chest complications have set in.

Several points are worth mentioning in regard to operative technic. The incision must be generous, permitting the introduction of both hands into the abdomen. Most surgeons prefer a vertical incision although with a definite diagnosis of upper abdominal injury, I often employ a transverse incision. The reason for this choice, especially with a preoperative diagnosis of a ruptured spleen, is that it gives access more readily to handling associated liver injuries. It is a more time-consuming incision to make and should not be used when active bleeding is occurring or in cases in which the diagnosis is doubtful.

With the relaxation associated with anesthesia and the sudden release of intra-abdominal pressure attendant on the opening of the peritoneum, one must be prepared for the occurrence of sudden massive hemorrhage. A venoclysis, preferably with blood already started, should be running prior to incising the peritoneum. Upon incision, the surgeon must be ready to compress immediately, with his hand, the splenic artery against the superior surface of the pancreas, the hepatic artery through the foramen of Winslow, or the aorta itself if necessary.

Care must be exercised in clamping and dividing the vasa brevia if the spleen is to be excised. All too frequently, the greater curvature of the stomach is traumatized, and a perforation develops subsequently.

Regardless of the major pathologic changes found, the entire abdomen must be explored. The diaphragms must be checked for rupture and all surfaces of the liver and spleen palpated carefully. The stomach and the entire bowel must be inspected inch by inch. Often it is more accurate and less time-consuming to deliver the entire small bowel out of the abdominal cavity. The large bowel, pancreas, kidney areas and retroperitoneal areas must be thoroughly inspected. The usual sites of injury to the small bowel are the relatively fixed portions: the retroperitoneal duodenum as it passes over the vertebral column, the jejunum near the ligament of Treitz and the terminal portion of the ileum. Suture closure or resection and anastomosis may be indicated in injuries of the small bowel. Perforations of the large bowel may be closed primarily if one also institutes a proximal colostomy. Exteriorization or resection and anastomosis with proximal colostomy may be indicated in some instances.

In injuries to the liver, drains should always be inserted through the abdominal wall regardless of the adequacy of the mattress suture closure.

Summary

A classification of closed abdominal injuries is presented.

Emphasis is placed on meticulous and frequent observation of the patient in order to delineate the diagnosis.

Early exploration is advocated for all suspected abdominal injuries, even if there are other severe injuries present.

Major points in the diagnosis and management of such injuries are discussed.

Jackson Memorial Hospital.

Blood Vessel Replacement Therapy

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MIAMI

For centuries men have entertained the thought of replacing diseased or worn out parts of the human body. Tissue grafting was discussed in the manuscripts of the ancients, and skin grafting, it has been reported, was attempted as long ago as Babylonian days.

In the latter part of the nineteenth century, as surgical technics and methods improved, the fundamentals of blood vessel surgery began to evolve. In 1899, Dorfler[1] published the essentials of the present day technics of blood vessel suturing, and in 1905 Dr. Charles Guthrie[2] and Alexis Carrel, working in the Hull Physiology Laboratories of the University of Chicago, demonstrated in the experimental animal that blood vessel transplants could be accomplished successfully. Autogenous vein grafts and homologous arterial grafts appeared equally successful in reconstructing arterial channels.

The clinical application of these important contributions, with few outstanding exceptions, was not generally realized until after World War II when, in 1949, Gross, Bill and Peirce[3] published their first article on the use of homologous arterial grafts in the operative correction of coarctation of the aorta. This publication evoked considerable interest throughout the world, and subsequently blood vessel banks were developed in many medical centers.

The use of homologous arterial grafts and autogenous vein grafts in the therapy of traumatic aneurysm and arteriovenous fistula proved to be highly successful in Korean war wounded.[4] As more experience was gained, the scope of blood vessel replacement therapy increased. The degenerative arterial diseases resulting in either aneurysmal dilatation or thrombotic occlusion appear to be on the increase as the life span of man is extended. Although it has long been recognized that arteriosclerosis is a systemic disease with widespread involvement of the arterial system, obliterative arterial changes and aneurysmal dilatation in many instances are segmental in nature and therefore may be amenable to surgical therapy. Armed with these concepts concerning the degenerative arterial diseases, the vascular surgeon today has opened before him a vast new field of blood vessel surgery.[5-8]

This report is based on experience with 46 operations in which blood vessel transplants of one type or another were used to reconstruct arterial continuity. Table 1 shows the total number of transplants divided into the significant anatomic regions. The earliest graft in this series was placed in the thoracic aorta in 1950 for the correction of coarctation. In table 2 is listed the operative mortality of the entire groups. Emergency operative procedures performed on aneurysms that had ruptured are listed first. One of the fatalities in this group occurred 16 days postoperatively because of renal failure which was preceded by jaundice (total serum bilirubin 24 mg.), the cause of which was not determined although transfusion reaction was suspected and thoroughly investigated. Generally speaking, these are extremely difficult cases to treat for many obvious reasons. The solution to such problems, of course, is to find the aneurysm and to remove it before serious complications can occur. It is well recognized at the present time that the course of an aneurysm cannot be predicted with any degree of certainty, and that in the majority, perhaps three fourths, of such cases serious and frequently fatal complications will develop within three years from the time the aneurysm is recognized.

Table 1.—Vascular Transplants

Abdominal aorta	18
Subclavian, axilliary, brachial	6
Thoracic aorta and arch	6
Iliac, common femoral	6
Superficial femoral, popliteal	10
Total	46

Table 2.—Mortality

	Operations	Deaths
Ruptured aneurysm operated as emergency	4*	2
Abdominal aorta	16	2
Thoracic aorta and arch	5	3
Peripheral vessels	22	2
Total	47	9 (19.1%)

*No graft used in first operation, one case.

Abdominal Aortic Grafts

Sixteen grafts were placed in the abdominal aorta as elective procedures (fig. 1 ab). In all

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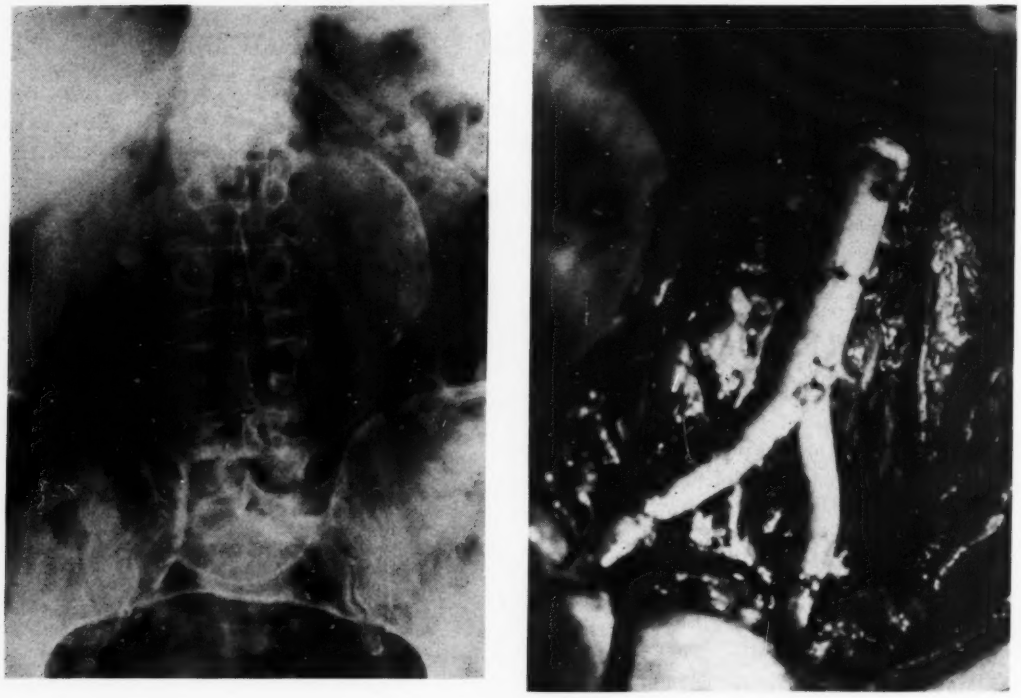

Figure 1

a. A typical arteriosclerotic aneurysm of the abdominal aorta arising below the renal arteries and extending to involve the aortic bifurcation.

b. Homologous arterial Y graft in place after excision of the aneurysm. Note the left renal vein just above the proximal suture line.

instances operation was carried out through a midline abdominal incision from the xiphoid process to the pubic bone. On two occasions the aneurysm was so large that a separate thoracotomy incision through the fifth intercostal space was performed, and control of the aorta above the diaphragm by finger compression facilitated dissection within the abdomen. Vessel suturing was accomplished with 0000 arterial silk and either a continuous everting mattress or simple over and over stitch (fig. 2). The everting mattress suture is advantageous when there is great disproportion between the host vessel and the transplant. End to end anastomosis is usually performed between the proximal aorta and the transplant; however, end to side anastomosis between the transplant and distal vessels is frequently found to be a most valuable method.

Two of the patients in this group died in the early postoperative period; both had severe obliterative vascular disease distal to the abdominal aneurysm. In both cases the internal iliac arteries were completely occluded, and despite the fact that good femoral pulses were obtained in each instance, adequate blood flow to the buttocks and perineum was not established, and death soon followed. It is presumed that circulation to the buttocks and perineum had been maintained by lumbar arteries arising from the aneurysm, and these, of course, were destroyed with excision of the aneurysm. Gluteal claudication was an important symptom in the history of each of these patients, indicating severe occlusive disease of the internal iliac artery.

Thoracic Aorta

In the thoracic aorta group there were six operations and three deaths. My associates and I have not had the fortune to see a large number of syphilitic aneurysms, which are more prone to occur in the thorax than elsewhere, and only one of these operations was performed for a syphilitic aneurysm which involved the distal aortic arch. Figure 3 shows the aneurysm which was excised and vascular continuity re-established by a homologous arterial graft, but unfortunately this patient succumbed in the early postoperative period. Figure 4 shows another thoracic aneurysm involving the descending aorta. This aneurysm ruptured, and at emergency thoracotomy it was

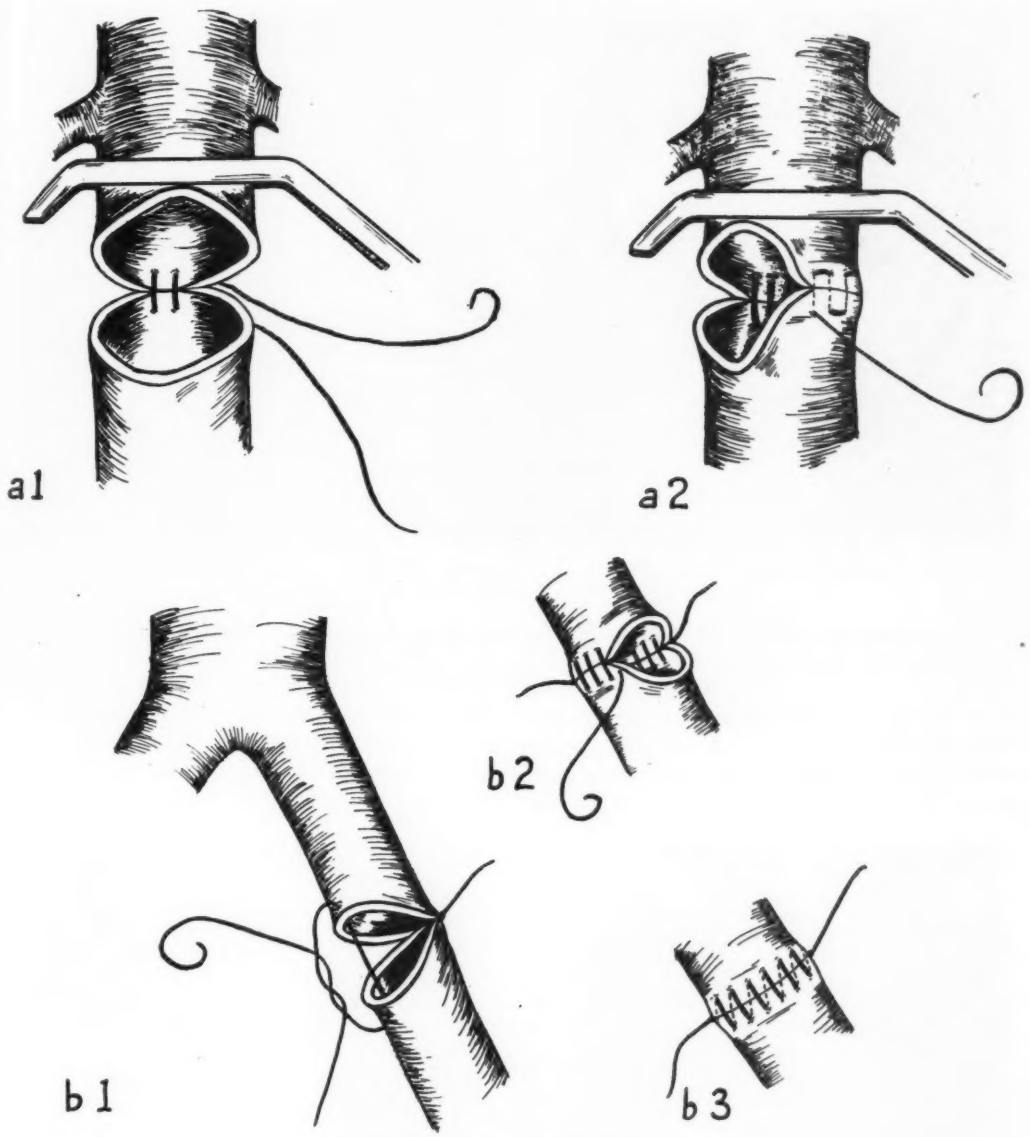

Figure 2. — Types of Suture

a 1. Homologous arterial graft is sutured to the proximal aorta using an everting mattress stitch.
b 1, 2, 3. The over and over suture has the advantage of ease of placement and is used except when there is disproportion between the vessels or the proximal aorta is badly diseased.

possible to control the hemorrhage. Definitive surgery was performed later at a more opportune time with highly satisfactory results. The roentgenogram on the left was taken after the aneurysm had been excised.

In each of these two instances hypothermia was used to protect the viscera distal to the aneurysm. As an additional safeguard, Tygon tubing (fig. 5) was threaded through the graft and placed in the lumen of the proximal and distal vessels so that blood flow was interrupted only for short intervals. Johnson, Kirby and Lehr[9] published a similar method using a flange on the internal shunt to prevent slipping. Here we have relied on length of tubing to prevent its slipping out of place. This tubing has a 3/8 inch internal diameter, and a good flow of blood through the operative area is obtained. Removing the tube is simple. Before

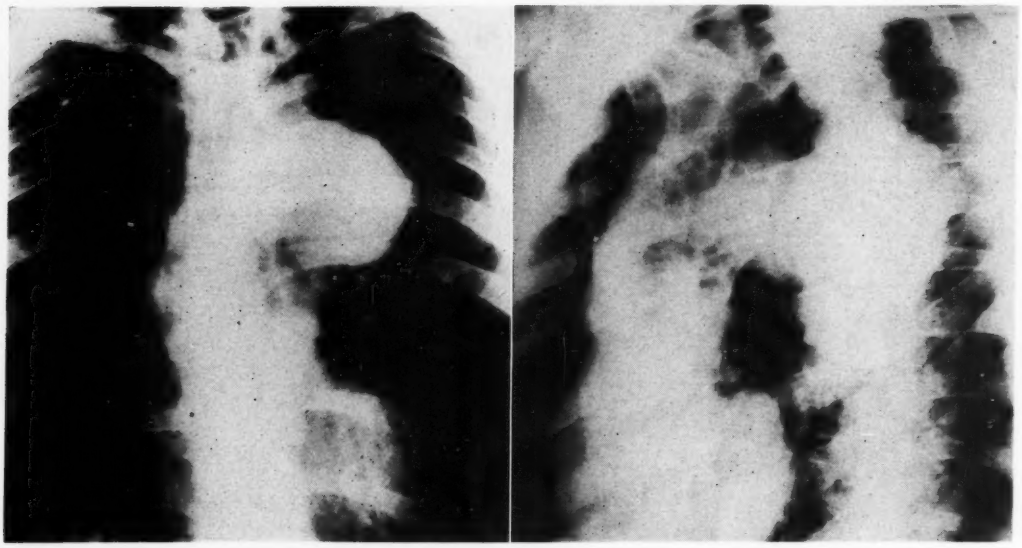

Fig. 3.—Syphilitic aneurysm involving the distal aortic arch.

the last sutures are placed, two hemostats grasp the tubing (fig. 5c), which is then cut between the clamps and the two pieces withdrawn. Thereafter it takes only a few minutes to complete the anastomosis. This method, of course, could not be used in lesions of the ascending or transverse portion of the aortic arch.

Obliterative Arterial Disease

In the obliterative arterial diseases our results have not been as good as with aneurysm.[10,11] The cases in this group are tabulated in table 3. One of the obvious problems in occlusive arterial disease is that the disease is diffuse and that there may be occlusion distal to the by-passed segment.

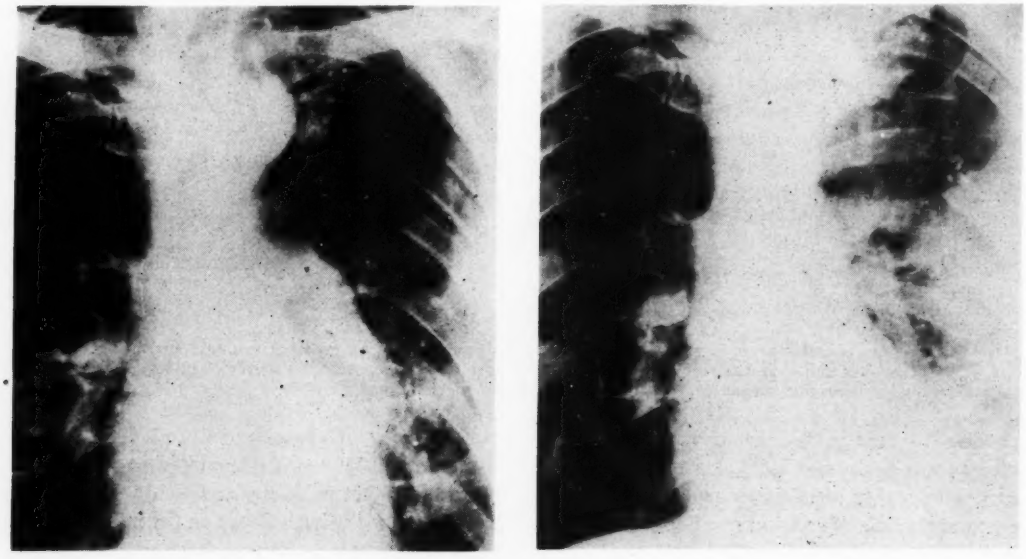

Figure 4

a. Arteriosclerotic aneurysm involving the descending thoracic aorta.

b. Postoperative roentgenogram after excision of the aneurysm.

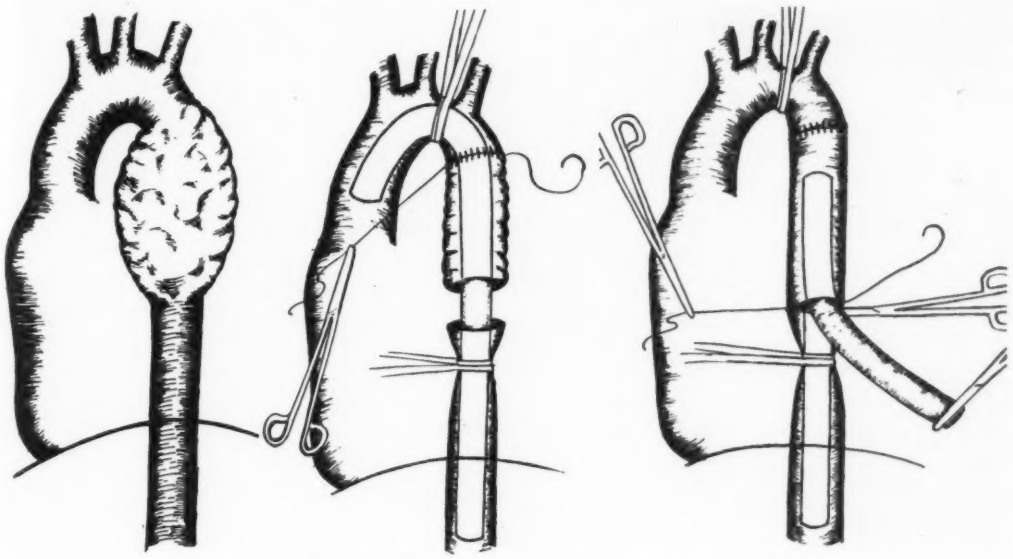

Figure 5. — Plastic tubing used as internal shunt.

In one instance of a common femoral to popliteal artery anastomosis, pulses were vigorous beyond the distal anastomosis, but the foot remained cool and discolored; no pedal pulses could be elicited. This, therefore, was a failure although we could still visualize a functioning by-pass graft. A more careful selection of cases perhaps will eliminate some of these failures; however, surprising results sometimes occur when circumstances would indicate otherwise.

Table 3.—Obliterative Arterial Disease

	Cases	Good	Fair	Poor
Terminal aorta	1	1		
Terminal aorta				
Plus external iliac	1		1*	
Plus femoral	1		1*	
External iliac	3	2		1
Superficial femoral	4	2	1	1
Total	10	5	3	2

*One leg improved.

To demonstrate this point, figure 6 shows the foot of a patient who had an amputation of the fifth toe for gangrene which followed minor trauma. The amputation site had not healed over a period of several months, and there was obviously deep-seated infection secondary to arterial insufficiency. Angiograms demonstrated a segmental block of the superficial femoral artery. A homologous arterial by-pass graft using end to side technic from the superficial femoral to the popliteal artery was constructed in an attempt to increase peripheral blood flow. This by-pass has functioned well (fig. 6b). Figure 6c, taken

Figure 6.—Femoral Transplant

a. Preoperative. b. Transplant in place. c. Three months postoperatively.

Fig. 7.—Autogenous vein graft in the common femoral artery after excision of an arteriovenous fistula.

several months later, shows a healed amputation site and rather dramatic improvement in the appearance and function of the foot.

Discussion

In the final analysis, of the patients who survived the operation for aneurysm the results have been most gratifying. In all instances peripheral circulation has been adequately re-established. Only two of these patients so far have died in the late postoperative period; one died of prostatic malignant disease and the other of a ruptured abdominal aneurysm after a successful transplant for a thoracic aneurysm. In both instances, autopsy was obtained, and the homologous graft was functioning well at the time of death.

In discussing the cause of failure of peripheral transplants, it should be pointed out that in all cases of traumatic arteriovenous fistula and aneurysm in which transplants were used to reconstruct vascular continuity, the results have been excellent. Of the peripheral transplants in this series, 14 were used for traumatic arteriovenous fistula and aneurysms of war wounded previously alluded to in this paper.[4] In nine of the 14 cases autogenous vein grafts were used and in five homologous arterial grafts. These transplants have functioned in a highly satisfactory manner for many years. Figure 7 demonstrates a vein graft in the common femoral artery which bridges a defect following excision of an arteriovenous fistula between the common femoral artery and vein. This vein graft has been in place now four and one-half years. Figure 8 shows an angiogram of a popliteal vein graft used to bridge a defect in the popliteal artery following excision of a traumatic aneurysm. Although larger than the artery, it has functioned satisfactorily since 1951. Figure 9 demonstrates by angiography a saphenous vein graft in the superficial femoral artery following excision of a traumatic arteriovenous fistula functioning since 1951.

We conclude, therefore, that when normal or near normal proximal and distal arterial segments are present, restoration of vascular continuity can be accomplished with certainty. In obliterative arterial disease, however, our experience would seem to indicate that it is the disease itself with skip areas of obliteration which in most instances determines the success or failure of these methods if they have been properly applied.

The use of plastic materials in blood vessel surgery is receiving much attention in the laboratory, and the clinical use of various plastics is increasing. Although we have used various types of woven cloth prosthesis in the experimental laboratory, we have placed woven plastic material in the human only on two occasions. Once in place, the plastic cloth prosthesis functions well. Suturing plastic cloth, however, in the normal blood vessel of the experimental animal is no trick at all, but placing this inelastic material in the vascular tree of the arteriosclerotic patient with aneurysmal dilatation above and obliterative arterial disease below is an entirely different prob-

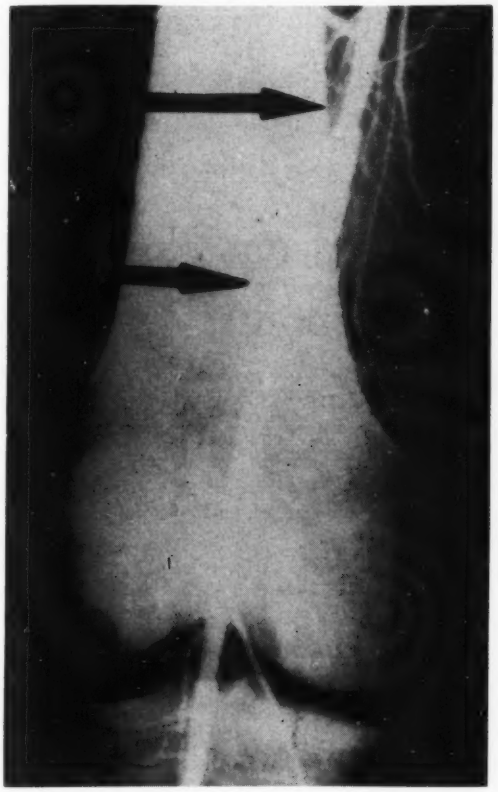

Fig. 8. — Angiogram showing a vein graft used to bridge a defect in the popliteal artery.

lem. It is primarily for this reason that this series is largely made up of homologous arterial grafts and autogenous vein grafts. For over two years now our banked grafts have been procured under ordinary autopsy conditions. They are then sterilized with Beta-Propiolactone,[12] quick-frozen and stored in the frozen state at minus 28° to 30° C.[13] Graft procurement appears easier as time goes on, and our graft bank has kept up with demands. Nevertheless, the use of plastics for many obvious reasons has certain advantages, and continued study of this problem is extremely important.

Summary

For short defects in peripheral vessels such as are encountered in traumatic aneurysm or arteriovenous fistula, the autogenous vein graft offers an excellent method of reconstructing vascular continuity.

The homologous arterial graft which has been sterilized and stored in a frozen state has given most satisfactory results in the surgical treatment of aneurysm.

The homologous arterial graft in the treatment of obliterative arterial disease has given satisfactory results, but not as satisfactory as for aneurysm; most of the failures we attribute to the nature of the arteriosclerotic disease itself.

The experimental use of plastic material is continuing.

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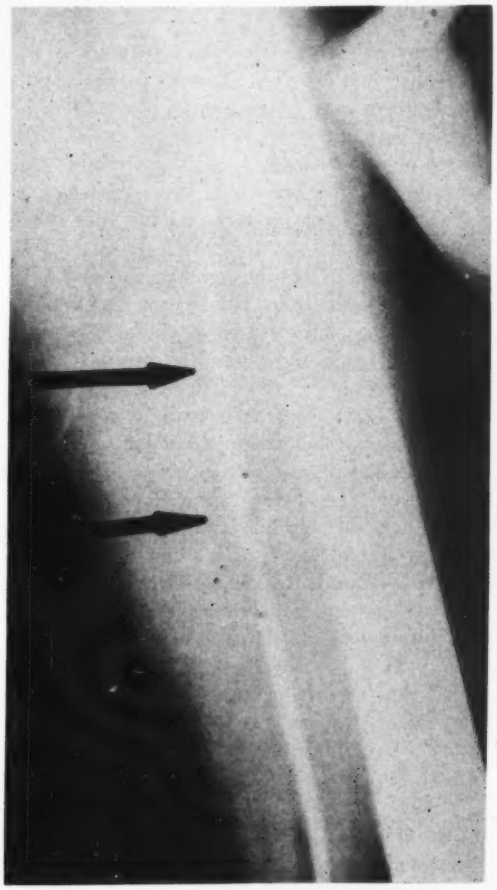

Fig. 9. — A saphenous vein graft demonstrated by angiography in the superficial femoral artery following excision of an arteriovenous fistula.

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Human Allergy Resulting from North American Snake Venoms

Report of Two Cases

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Many animal proteins are known which produce allergy in humans. Various animal danders and feathers may produce respiratory allergy or contact dermatitis. Horse serum is an important source of serum sickness and anaphylactic shock in man. Deaths have been reported which resulted from allergy produced by the bites of ants and spiders, and the stings of bees, wasps, and yellow jackets.[1] Some writers have suggested that occasional deaths from snake venom poisoning are due to allergy, but a search of available literature reveals reports of only two cases in which allergy to the venom of North American snakes was confirmed. Zozaya and Stadelman,[2] using scratch tests, demonstrated allergy to snake venom in a man who had been injected with several kinds of venom for experimental purposes and in whom coryza and sneezing later developed when he was working around dried snake venom. Lounsberry[3] reported a case in which anaphylaxis and a generalized dermatitis developed when the patient was bitten by a rattlesnake. He attributed this allergy to a previous snakebite which had rendered the patient hypersensitive to venom. The purpose of this paper is to report two additional cases of hypersensitiveness to the venom of North American poisonous snakes.

Snake venom is a complex substance comprised chiefly of proteins.[4] Kellaway[5] attributed the toxicity of snake venoms primarily to proteolytic enzymes, phosphatidases and neurotoxins. They also contain powerful spreading factors, including hyaluronidase, which promote their spread in the body tissues. Histamine is released when venom is injected into animals or man. Since snake venom is an animal protein, there is the possibility that hypersensitiveness to it may develop.

Report of Cases

CASE 1.—A 34 year old white man, a professional biologist, has worked with poisonous snakes and has received 12 different bites and a number of relatively insignificant scratches from venomous snakes. He has been bitten by seven cottonmouth moccasins (Agkistrodon piscivorus), three rattlesnakes (two Crotalus horridus atricaudatus and one Sistrurus miliarius miliarius), one copperhead moccasin (Agkistrodon contortrix contortrix), and one New Guinea brown snake (Demansia olivacea) which belongs to the same family as the North American coral snake. All of the bites have been confirmed clinically, and the offending reptile identified in each instance. The patient was treated by first aid measures (incision and suction, and a tourniquet) for each bite, and has never received antivenom for any of his snakebites. According to Wood, Hoback and Green's clinical classification[6] for the severity of a poisonous snakebite, this patient has had three severe, three moderately severe, and six minimal venenations. Following his last three cottonmouth moccasin bites, the patient experienced periorbital edema and a generalized erythematous rash. After his last moccasin bite he also felt as if his throat and Eustachian tubes were swelling, and he experienced sharp, nonlocalized substernal pains. There is a family history of allergy; the mother has a food allergy. The patient is a robust white man in good health. The physical examination was within normal limits except for a mild systolic hypertension; the blood pressure was 160 systolic and 88 diastolic.

CASE 2.—A 45 year old white woman has no family history of allergy. She began working with liquid and dried snake venoms 12 years ago, and 11 years ago inadvertently pricked her finger on the fang of a dead western diamondback rattlesnake (Crotalus atrox atrox). Pain and swelling of the involved finger occurred, but the swelling was localized there. This incident may be

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classified as one of minimal venenation. No specific treatment was given, and the patient completely recovered in three days. About six months later she began to experience coryza when working around venom, particularly moccasin venom. Occasionally she would break out in a fine generalized erythematous rash if exposed to venom for a long period of time. Her symptoms have grown progressively worse and now include a sensation of swelling in the throat with difficulty in swallowing and breathing. These attacks last for several hours, and are alleviated by antihistaminic drugs. The patient was also bitten by a black widow spider (Latrodectus mactans) 12 years ago. She was ill for three days following this serious bite. Physical examination of this patient was within normal limits.

Materials and Methods

Since these two cases suggested allergy to snake venom, we decided to perform dermatologic patch and scratch tests to confirm the presence of hypersensitiveness. Because snake venom is a highly toxic substance, patch tests were used first. Two persons who had never been snakebitten or exposed to snake venom were used as controls.

Fresh undiluted cottonmouth moccasin (A. piscivorus) and eastern diamondback rattlesnake (C. adamanteus) venom were applied to the opposite forearms of the two patients and the two control subjects by means of 8 mm. circular gauze patches. A patch with normal saline was used as a control on each one. The tests were read in 24 hours.

Because the patch tests were not conclusive, scratch tests were performed on all four subjects 48 hours later. The method employed was to clean the inner aspect of both forearms with an alcohol sponge and make a superficial scratch, 4 to 6 mm. long, with a No. 11 Bard-Parker scalpel blade. Cottonmouth moccasin venom was applied to one forearm and rattlesnake venom was applied to the opposite forearm by dipping a toothpick in the venom and painting the scratch lengthwise. Less than a drop of venom was used on each scratch. The scratch tests were read 20 minutes later.

Results

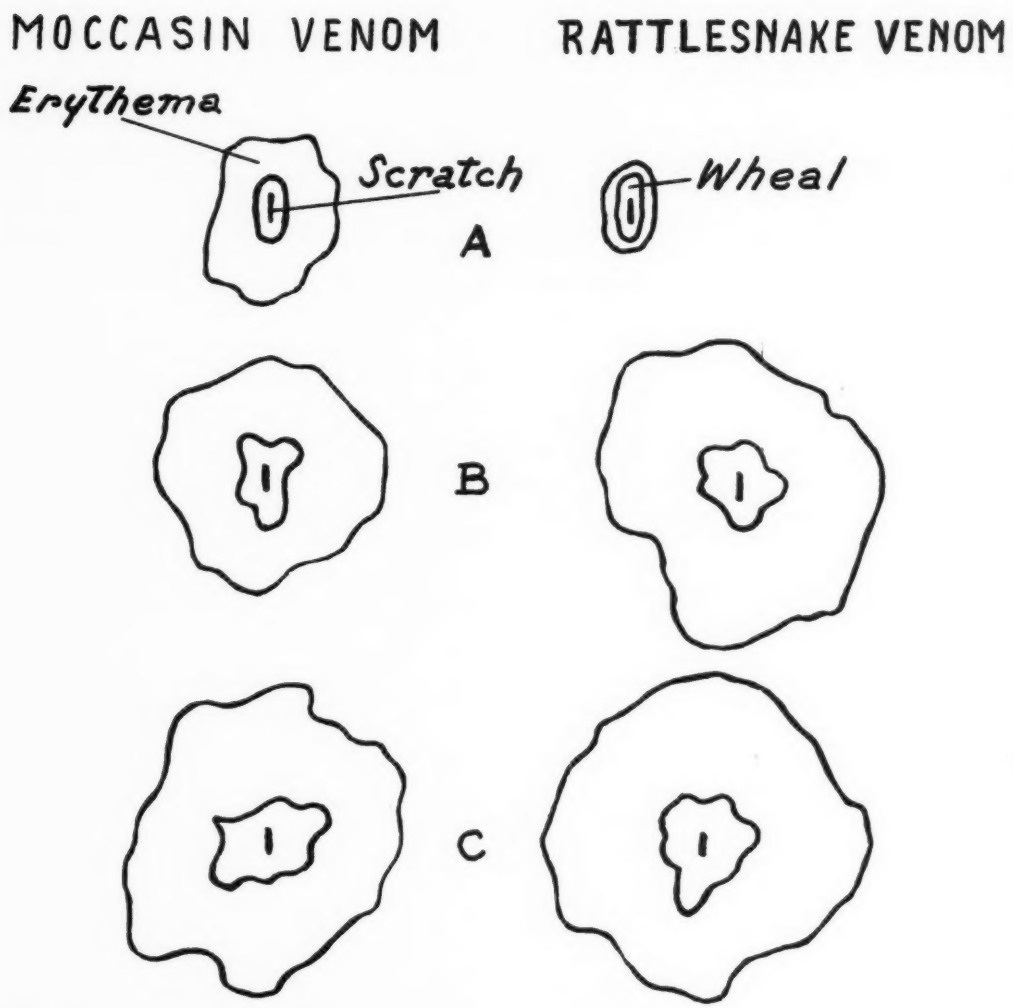
The patch tests gave negative results on both control subjects and on the patient in case 2. The patient in case 1 exhibited a definite positive reaction to rattlesnake venom in 24 hours, which was manifested by an 8 mm. wheal surrounded by an area of erythema 22 mm. in diameter. Itching was present in the area starting five hours after the venom was applied. A similar, but delayed, reaction was obtained about 30 hours after a patch of moccasin venom was applied.

There was a noticeable difference in response to the scratch tests of the control subjects and the allergic patients. Twenty minutes after rattlesnake venom was applied to the control subjects, a wheal was formed which measured 7 by 10 mm., and an area of surrounding erythema was present which measured 10 by 13 mm. The response of the controls to moccasin venom was more pronounced; the wheal measured 8 by 12 mm., and the surrounding erythema measured 18 by 24 mm. A sharp burning pain was experienced by each normal test subject commencing about two minutes after the venom was applied. There was only a 1 or 2 mm. difference in the size of the wheal and the erythema produced by each venom in these subjects; hence the average measurements are given.

In contrast to the control subjects, the allergic patients exhibited a more pronounced response to both of the venoms. The wheals were larger and had pseudopods, and the area of surrounding erythema was much more extensive. In case 2 there was itching in the area of the rattlesnake venom, and in case 1 itching occurred in the area where both of the venoms were applied. Figure 1 illustrates the actual size of the reactions.

In order to gather additional positive evidence of allergy, a modified Prausnitz-Küstner test of local passive transfer of hypersensitiveness was tried. The technic described by Kolmer, Spaulding and Robinson[7] was used. Briefly, 0.1 cc. of serum of the patient in case 1 was injected intradermally into the forearm of one of the control subjects, and 24 hours later the scratch tests were repeated. The responses were much more extensive than in the original tests on this subject; they were almost identical to the responses to the scratch tests of the allergic patient. Figure 1B shows the reaction of the control after he had become hypersensitized, which is in contrast to his original response (fig. 1A).

Some doubt still existed as to the validity of interpreting these results as allergic rather than irritative manifestations since the response of a group of normal subjects who have never been snakebitten was unknown. Twenty normal persons, with no history of snakebite, were scratch-tested with moccasin and rattlesnake venoms. There were four types of response, namely: (1) the erythema produced by moccasin venom was more extensive than that resulting from rattlesnake venom in seven patients; (2) the erythema resulting from both venoms was extensive and approximately equal in six patients; (3) both venoms produced a wheal but little erythema in six patients; and (4) rattlesnake venom produced a more extensive area of erythema than moccasin



A. ORIGINAL RESPONSE OF CONTROL SUBJECT

B. RESPONSE OF SAME CONTROL SUBJECT AFTER INJECTION OF ALLERGIC PATIENT'S SERUM. (PRAUSNITZ-KÜSTNER TEST)

C. RESPONSE OF ALLERGIC PATIENT.

Fig. 1.—Responses to scratch tests with snake venoms (actual size).

venom in one patient. In each of these tests the wheal was approximately the size and shape of those seen in figure 1A. The wheals produced in these normal subjects were smaller and did not exhibit the pseudopods observed in the wheals of the allergic patients, and the surrounding area of erythema was smaller in the normal subjects than that present in the allergic patients. We believe that these four types of response are not a result of technical errors since one of us (H.M.P.) performed all of the scratch tests.

The results of these scratch and passive transfer tests would seem to confirm the presence of venom allergy in these two patients.

Discussion

The venom of North American pit vipers has the potentiality of causing allergy in humans. Weiss[8] demonstrated anaphylactic phenomena in guinea pigs which had been injected with South American snake venoms. He found zoologically related venoms elicited the same response. Repeated snake venom poisoning in the same person is not as rare as some people think. Allen and Neill[9] reported that of 600 cases of snakebite they collected from newspaper accounts with a follow-up questionnaire, 91 were in amateur or professional snake handlers. Watt, Parrish and Pollard[10] described snakebite as an occupational disease for this group. From the two cases reported here and those described in the literature, one may conclude that repeated exposure (bites with or without contact to dried or liquid venoms) to snake venom enhances the possibility of hypersensitiveness developing, including anaphylactic reactions. Very likely, some deaths from poisonous snakebite are the result of anaphylaxis.

These case studies demonstrate that certain venoms elicit an antibody response which produces hypersensitivity to other closely related venoms. For example, the patient in case 2 is allergic to moccasin (A. piscivorus) venom and eastern diamondback rattlesnake (C. adamanteus) venom in spite of the fact that her only episode of envenomation was by a western diamondback rattlesnake (C. atrox). Similarily, the patient in case 1 is allergic to eastern diamondback rattlesnake (C. adamanteus) venom, but has received his bites from other rattlesnake species (S. miliarius miliarius and C. horridus atricaudatus). In support of this phenomenon is the fact that Wyeth's recently developed Polyvalent Antivenin offers protection against many species of North and South American pit vipers although it is made by injecting horses with a mixture of but four venoms. Evidently the action of certain venoms may produce a state of polyvalent hypersensitiveness in man.

Summary

The case studies of two patients who are allergic to North American snake venoms are presented. The presence of hypersensitivity was confirmed by patch and scratch tests made with undiluted fresh venoms.

The evidence presented seems to indicate that, in humans, certain venoms may elicit hypersensitivity to closely related venoms.

It is suggested that some deaths from snake venom poisoning may result from anaphylaxis rather than the toxic effects of the venom as such.

Appreciation is expressed to Mr. Ross Allen and Dr. Wilfred T. Neill of Ross Allen's Reptile Institute, Silver Springs, Fla., for supplying the venom used in this study and for reviewing the manuscript.

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ABSTRACTS

The Study of the Sterile Couple. By M. Edward Davis and Albert G. King. Postgrad. Med. 19:131-143 (Feb.) 1956.

The inability to have children is of serious concern to a fairly large segment of the population. It has been estimated that about 15 per cent of marriages are barren and that in at least 10 per cent of these the failure to have a baby is of sufficient concern to cause the couples to consult a physician. The initial medical contact is extremely important in the ultimate progress, the authors of this comprehensive, well illustrated article point out, for far too often the family doctor contributes little to unraveling the cause of the infertility and indeed may unwittingly decrease the patient's chances of having a baby by postponing indefinitely an adequate sterility investigation. They advocate a complete sterility study in every couple who consult a physician because of their inability to have children and they regard a carefully conducted diagnostic survey as the best therapeutic regimen for infertility. They describe such a study in some detail and point out that it can be carried out by the family doctor, who rarely may need help from the specialist in this field.

Roentgenographic Demonstration of Intestinal Ascariasis in Children Without Using Barium. By Ivan Isaacs, M.D. Am. J. Roentgenol. 76:558-561 (Sept.) 1956.

In this article the author points out that the roentgenographic demonstration of masses of Ascaris lumbricoides in the intestinal tracts of children is sometimes possible without the introduction of contrast mediums. He was able to find only three brief references to this simple means of roentgen diagnosis in the English medical literature and observed that it does not seem to be generally included in the common fund of radiologic knowledge in this country. The roentgenographic visualization is due to the positive shadows of multiple worms contrasted against the gas in a distended segment of small intestine. The characteristic appearance of such worm masses causing partial intestinal obstruction is described, with three illustrative cases. Its recognition may be of occasional diagnostic significance in the detection of vermicular ileus in children.

Tracheostomy Scar Revision. By H. Clinton Davis, M.D., Benjamin Musser, M.D., and L. G. Glasson, M.D. Laryngoscope 65:276-281 (April) 1955.

The ever increasing use of tracheostomy as an adjunct in medicine and surgery has made the physician more aware of the typical secondary intention scar deformities. Often the operation is performed hastily for life-saving reasons without thought of cosmetic planning. Surgical considerations with regard to the revision of these cicatricial lesions serve as a basis for this paper. The several varieties of common tracheostomy scar deformities are presented, and their surgical correction is discussed.

Pelvic Fused Kidney. By A. Lane Miller, Jr., Arthur W. Brown and Gilbert C. Tomskey. J. Urol. 75:17-20 (Jan.) 1956.

Fused pelvic kidney is one of the most unusual congenital anomalies encountered in urology, either clinically or at autopsy. It has been described variously as the lump, shield, cake, or discoid kidney since it presents as an irregularly-shaped fused pelvic mass. The authors found reports of 11 cases in the available literature. They report a case of hydronephrotic fused pelvic kidney in a patient, aged 24 at the time of operation in March 1951, who has thus far had satisfactory results from a plastic repair of the ureteropelvic junction. He was subjected to two postoperative examinations, which showed that the kidneys had improved markedly, as evidenced by lack of infection, nonrecurrence of the hydronephrotic mass, improved pyelographic studies and absence of symptoms. The authors point out that while treatment of necessity must be suited to the individual case, adequate drainage is the primary problem. In their case, this was successfully accomplished by a Y-plasty on the right and by simply freeing the ureter on the left since no other obstruction on that side was evident.

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A Hippocratic Duty Too Seldom Fulfilled

> "I WILL PAY THE SAME RESPECT TO MY MASTER IN THE SCIENCE AS TO MY PARENTS AND SHARE MY LIFE WITH HIM AND PAY ALL MY DEBTS TO HIM. I WILL REGARD HIS SONS AS MY BROTHERS AND TEACH THEM THE SCIENCE, IF THEY DESIRE TO LEARN IT, WITHOUT FEE OR CONTRACT. I WILL HAND ON PRECEPTS, LECTURES AND ALL OTHER LEARNING TO MY SONS, TO THOSE OF MY MASTER AND TO THOSE PUPILS DULY APPRENTICED AND SWORN, AND TO NONE OTHER."
>
> (HIPPOCRATIC OATH)

A busy physician's private practice is perhaps the richest source of experience for the creation and accumulation of skills in the diagnosis and treatment of disease. Any observant physician—as most of us are—has in his private practice, no matter its type, unlimited daily opportunities for research into the causes and disturbed mechanisms which bring on diseases and into the means of preventing and correcting them. After 10, 20 or more years of such work, he becomes the possessor of a vast treasure of medical knowledge. Unfortunately, the acquiring of such vast knowledge conveys increasing demands upon the physician's time, and usually, the more he learns, the less time is left to him for conveying that knowledge to others.

Many of the reports in current medical literature referring to new discoveries upon the causes and ways of treating several illnesses are read by many practitioners who find they had themselves long ago reached the same understanding of the problem at hand, but could never find enough time to write about their findings and see their reports published.

It is our duty, included in the Hippocratic Oath, to teach others what we have learned so that medicine's progress shall continue forever for the benefit of mankind. It is really a pity that many of us seem unable to find enough time to fulfill this pledge. Because of that failure, there is an obvious imbalance in medical literature between the tremendous number of reports published by specialized research men and women, dealing mostly with basic science subjects, and the reports which should be published by practicing physicians regarding the application of such technical data to the practical everyday management of patients.

It seems desirable that many more practicing physicians would make a part of their yearly schedule of work the reservation of some time off from their daily routine, not only to enjoy an occasional pleasant vacation—which is also a judicious and salubrious practice—but also to spend a few extra hours for the purpose of jotting down some of the observations they have made in the course of their practice which might be of benefit to other practicing physicians and, most importantly, to their patients.

As a physician rounds out years upon years of busy practice, his judgment becomes sharper and is polished by experience; his mind never ceases to mature. A time comes, after years of such continuous study and observation, when he must realize that at least some of his treasured knowledge should be imparted to others, for all men should share in what each one of us learns. Our patients teach us, and to them we are indebted. What we learn from those under our care and study should also benefit others who may be in need of such knowledge.

It is not necessary to be either a "professor" or a specialized researcher working in elaborate laboratories to be able to contribute some new ideas, new concepts, new technics to medicine. Some of the most valuable contributions have been made by simple practitioners from shrewd deductions made while caring for and observing their own patients. The more intimate the relationship between a physician and his patients the more opportunities are afforded for observation and for learning new facts from them. The scourge of yellow fever was for many years a deterrent to international commerce and to the development and progress of many nations. Highly scientific research studies had been carried on for many years by well trained and competent men, and still no solution to the problem had been found when the Spanish-American War was ending in Cuba in 1898, with more casualties occurring in the three armies involved due to the yellow fever epidemic than to bullets. A modest family physician with very limited resources had long before made a shrewd and simple observation. It was so simple that he was repeatedly laughed at for his conviction that yellow fever was transmitted by a mosquito. He had no laboratory facilities except the crude cages he had made himself to trap mosquitoes in order to learn how to identify and differentiate the varieties then overwhelmingly prevalent in Havana. Nevertheless, by patiently watching around he had learned that wherever a focus of the epidemic appeared in a neighborhood of the war-crowded city, the mosquito Culex fasciatus or Stegomia fasciatus, now called Aedes aegypti, was prevalent in the area.

He had published his observation in a short article in the American Journal of the Medical Sciences in 1886. Though he had proved it by actually producing the plague in five men volunteers who had agreed to be bitten by mosquitoes which had previously bitten yellow fever victims, it took almost 15 years for this fact to be accepted and applied to the elimination of the disease.

To the end-of-the-century mind his concepts, which the present generation takes for granted, were little less than absurd. The scientists assigned by the United States occupation forces to study the problem were most reluctant to accept them. It was only in desperation, when all other approaches had been exhausted in repeated failures, that Walter Reed in 1900 turned to Carlos Finlay, the "little crazy doctor," and listened to his simple observations and deductions. Within a few weeks Finlay's theory was proved at the cost of a few additional heroic lives, with the resulting saving of untold millions more. The campaign for eradication of the mosquito turned a dirty colonial city, plagued with yellow fever for over 150 years, into one of the cleanest capital-ports in the world, and the construction of the Panama Canal, delayed for many years, became possible.

Finlay's contribution to the welfare of mankind is by no means unique among the experiences of modest practicing physicians, though it was one of the greatest. Innumerable equally worthy contributions have been made by many other modest men of medicine from similiar simple observations and shrewd deductions. James Lind's observations as a royal navy physician leading to the conquest of scurvy, those of Semmelweis which eliminated puerperal fever, and many others, are enshrined in medicine's annals.

How many other contributions just as useful to mankind could be harvested from today's doctors working everyday at their practices?

Modesty and timidity usually go together, and courage is a rarer virtue than prudence. If Finlay's modesty and prudence had not been overcome by the courage of his convictions, many more lives might have been lost before the problem of yellow fever would have been solved.

It is easy—and lazy—to say: "There are too many medical articles being published already.

Why should I stick my neck out?" If, however, you have learned something, no matter how simple or unorthodox it may appear, if you possess some knowledge that you have been able to use in your own practice again and again with benefit to your patients, if you have the conviction that such bit of knowledge is really useful, do not keep it to yourself. A simple statement of facts learned and of your own experience with your application of them in a communication to your fellow practitioners is your duty under your Hippocratic Oath. If you are too shy or your time is too short for a lengthy article, a short "letter to the editor" of your Journal many be sufficient. More valuable contributions have been made to medical literature in such short report forms than in many extensive and verbose papers; but no matter how you do it, write down your subject clearly and concisely and submit it.

Your contribution may or may not be published. It is the duty of the editorial board of a medical journal to assist you by checking your facts as far as possible and avoid gross errors in print. If what you have to say comes from the sound, mature and critical mind of a practicing physician of experience, the chances are mostly in your favor. Your contribution may or may not be of epochal importance, but if it will—in any way—help someone else, its publication will earn for you a great personal satisfaction and a place among those who constantly strive for a better practice of medicine and for a healthier and happier humanity.

American Medical Association Meets in New York June 3-7, 1957

Elaborate preparations are nearing completion for the 106th Annual Meeting of the American Medical Association, which will be held in New York City early next month. Opening on June 3, the sessions will continue through June 7. Registrations were heavy as early as January, indicating an exceptionally large attendance, which will doubtless exceed that of the 1953 New York meeting. Advance hotel reservation forms have been appearing frequently in the Journal of the American Medical Association since the first of the year, and physicians are reminded that all reservations for New York hotels listed should be cleared through the A. M. A. Subcommittee on Hotels before May 25. The headquarters hotel is the Waldorf-Astoria, and the Roosevelt Hotel is the Woman's Auxiliary Headquarters.

Members from every state in the union and visitors from every country will converge on New York for the meeting, making the city the medical capital of the world in June. Nowhere could one find a more fruitful source of new information on the advances of scientific medicine than at this outstanding session. The broad variety of subjects covered will interest all branches of the profession. For nearly five full days the program provides lectures, scientific exhibits, technical exhibits, color television and motion picture presentations which comprise a comprehensive short course in postgraduate medical education. Individual physicians will have ample opportunity to discuss their problems with demonstrators in the scientific exhibits.

For some 18,000 physicians from all over the country the focal point of the scientific program will be the Coliseum, New York's new exhibition hall, which boasts such facilities as air conditioning, escalators, elevators, a cafeteria, and snack bars. Four floors will be devoted to technical and scientific exhibits, many of the scientific meetings, and the color television program. For the first time, a foreign air will be added to the regular medical film program, to be held at the Barbizon Plaza Hotel. More than 20 foreign countries are sending special films, dealing with many aspects of medical science, to the "international medical film program."

The general scientific program on Monday morning, June 3, will be a review of recent progress in surgery, while the afternoon session will deal with recent advances in medicine. Tuesday morning's general meeting will feature a discussion on the use and abuse of mood-altering drugs in daily practice. Formal section meetings will run from Tuesday afternoon through Friday morning. Many of the sections will combine to present special symposiums and panel discussions. A session on legal medicine will be featured by a mock trial involving the testing of drinking drivers. Special exhibits on fractures, diabetes, peri-

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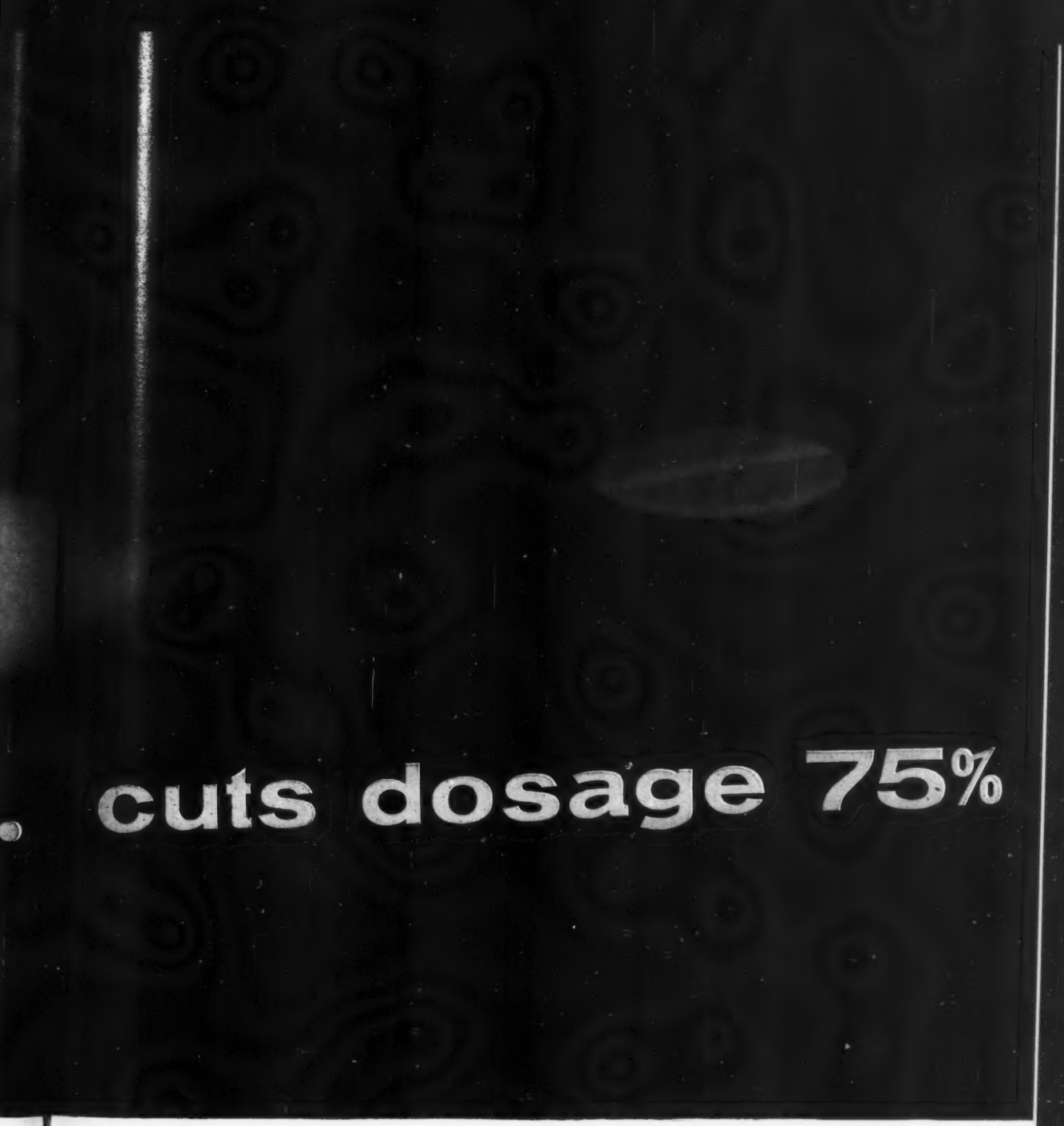

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natal mortality, pulmonary function testing, fresh tissue pathology, arthritis, and nutrition also will be presented.

At this meeting a change will be initiated in presenting the annual Joseph Goldberger Award in clinical nutrition. The award will be presented to the recipient at the opening session of the House of Delegates. The Board of Trustees in cooperation with the Nutrition Foundation established the $1,000 award to serve as a stimulus to medical investigators in advancing the frontiers of public and personal health, with special reference to the significance of good nutrition. In addition to the award, named in honor of the late Joseph Goldberger who discovered the cause and treatment of pellagra, there will be a Goldberger lecture by the recipient at one of the section meetings. Both the award and the lecture will become an annual feature at the June meetings of the American Medical Association.

It seems particularly timely that among the innumerable attractions of New York City there is a current Broadway hit which pays homage to the doctor. "The Most Happy Fella," a musical with light opera overtones based on Napa Valley, the wine-producing center of California, has "The Doctor," played by Keefe Kaldenberg, as one of the principal characters. He is the general practitioner of the community. "Seldom has the medical profession been placed in a better light," comments Dr. George F. Lull, Secretary-General Manager of the American Medical Association. "The role of the physician is played with sympathy and understanding. One can not but wonder if the author, Frank Loesser, did not have in mind Dr. Dwight Murray of Napa, president of the A. M. A., when he depicted the doctor with his broad understanding, humanity, and sympathy for his patients, and made him a central figure in the community's activities."

Attractive post-session tours to Europe and Bermuda are being offered. Of two European tours, one of 24 days includes France, Italy, Switzerland, Belgium, and France, and the other, requiring 38 days, visits England, Belgium, Holland, Germany, Switzerland, Austria, Italy and France. In cooperation with the World Medical Association, special scientific sessions of exceptional interest have been planned in London, Paris and Geneva. The post-session program also includes three trips to Bermuda—one of five days, one of eight days by air, and one of eight days by air one way and by steamer one way.

Naturopathy in Florida Officially Investigated

Governor Collins recently released a report on the practice of naturopathy in Florida which deals a heavy blow to naturopaths in the state. The report, based on an investigation ordered by the Governor and extending over a period of several months, recommends that the state legislature "abolish the practice of naturopathy and prohibit its future practice in this state." It is estimated that there are approximately 350 naturopaths in the state.

Last September, the Governor commissioned Mr. P. W. Sapp, Inspector, Bureau of Narcotics, Florida State Board of Health, to inquire into the operations of the State Board of Naturopathic Examiners and into the background of those examined by this board. The 109 page report summarizes the results of his investigation. In releasing the report, Governor Collins stated:

"The protection of the health of the citizens of the State of Florida is one of the primary functions of government.

"The practice of naturopathy has caused a great deal of controversy in the courts and legislature for many years in our state.

"In view of these considerations, and irregularities which have been called to my attention in recent months, I requested that an investigation of naturopathy in Florida and its status over the nation be conducted by a qualified person selected by the State Board of Health.

"On September 4, 1956, Mr. P. W. Sapp, Inspector, Bureau of Narcotics, State Board of Health, was assigned to this task.

"I have submitted a copy of this report to the State Board of Naturopathic Examiners and if such is desired a hearing will be provided prior to the formulation of any recommendations I shall make in respect to this matter to the Legislature."

The details of so-called schools claimed as sources of diplomas by naturopaths licensed in Florida constitute a particularly revealing feature of the report. In regard to naturopathic education the report said:

"Information pertaining to naturopathic education is difficult to obtain because schools are small affairs of a fly-by-night character with few students and several months of investigation including correspondence and on the spot visiting revealed no school which confines its teachings to naturopathy. In every instance where any type of school existed, naturopathy was nothing more

than part of a course given for the training of chiropractors."

The investigator of these so-called schools further reported that:

"None had even one adequately trained teacher on the faculty, for there is no naturopathic school where they could be adequately trained;

"None had one worthily equipped laboratory;

"None conducted a clinic in which a wide variety of common diseases could be studied;

"None had any affiliation with a worthy hospital;

"None apparently has ever been surveyed by any recognized educational authorities to justify the extravagant claims made in their brochures and catalogues;

"None existed where any internship, externship or preceptorship is required;

"Their liberal granting of degrees has for its purpose the accommodation of the individual in his quest for state licensure, rather than qualification as a healer in any one phase of the healing art;

"All owed their existence to the demand for, and to the fact that they offered, a short cut to the practice of medicine;

"The operators of several were involved and indicted in diploma mill frauds; and

"All proceeded on the basis of unproved theory, ignoring the lack of indorsement by any recognized educational institution."

The naturopathic situation in Florida is unique. The state has the opprobrious distinction of being the only one in the entire United States in which these so-called drugless healers are, by reason of judicial interpretation of licensing laws, able to dispense and prescribe narcotics and antibiotics.

Inquiries to the Governors of each of the 47 states other than Florida regarding the legal status of naturopathy in their respective states revealed that 33 states do not recognize or license naturopaths. Six states formerly recognized them, but currently do not; among these are Georgia and South Carolina whose legislatures abolished the practice of naturopathy in 1956. Only four states currently license them. From four states there was no reply. It is noteworthy also that "naturopathy is not recognized in any capacity as a branch of the healing arts by any department or agency of the federal government."

On March 7, 1957, the Florida Medical Association made its position in the matter clear by issuing the following statement:

"The Florida Medical Association, through its House of Delegates, has approved the support of a bill in the 1957 Session of the Florida Legislature to abolish the practice of naturopathy in Florida. This is the same position it has held for many years.

"The extensive investigation into naturopathy which was requested by Governor LeRoy Collins presents irrefutable evidence that the laws allowing these so-called drugless healers to practice in Florida should be repealed. The report reveals that naturopathy is a fraud which should not be imposed upon the general public of our state.

"Governor Collins and the State Board of Health should be highly commended for undertaking this expose to protect the health needs of the public, and we hope the members of the Florida Legislature will recognize their public duty in this respect and pass legislation outlawing this vicious practice and fraud in Florida."

Dr. Joseph Halton Receives First Life Membership Certificate

The Sarasota County Medical Society at its meeting on April 9 honored Dr. Joseph Halton, who this year rounds out 50 years of practice in Sarasota. Anticipating by four weeks its plan to initiate at the forthcoming annual meeting in May the practice of awarding a Life Membership Certificate to all active members of 35 years' standing, the Florida Medical Association presented to Dr. Halton on this occasion the first such award. Dr. Francis H. Langley of St. Petersburg, President of the Association, made the presentation.

Dr. Samuel Kaplan of Sarasota, the president of the Sarasota County Medical Society, presided at the dinner meeting, which was devoted to special recognition of Dr. Halton for his half century of service in the community. The members enjoyed Dr. Halton's reminiscences as the highlight of the evening's entertainment.

Born in St. Helens, England, Dr. Halton came to the United States at the age of eight years and resided in Ohio and Indiana. In 1906, he received his medical degree from the University of Cincinnati and the following year he established his practice in Sarasota. A pioneer in the area, he surmounted the difficulties of medical practice and also became one of the early builders of the city of his choice. He engaged in intensive research in hookworm disease, so prevalent in Florida in the early years of this century, and

was a pioneer in x-ray work. He was also one of the first physicians in the state to use insulin with great success.

Ever a student bent on progress in medical and surgical research, Dr. Halton has kept abreast of the tremendous advances in medicine across the last half century by periodic postgraduate study in the leading clinics of this country and in the clinics of France, England and Scotland. The Halton Clinic for Children, established in his own private hospital, where operations have been performed on over 2,000 children, is well known. Possessor of a fine baritone voice, Dr. Halton has found time through the years to be generous with his musical talent as well as his professional skill. For several years he trained and directed the large vested choir of the Episcopal Church of the Redeemer.

Congratulations to this stalwart, forward-looking member of his county and state medical societies for his achievements through the years and his devoted service to mankind. May he continue to carry on in the best tradition of his profession for many years to come.

Graduate Medical Education

Hematology Seminar June 20-22

The Seminar on Hematology, to be held June 20-22 at the College of Medicine of the University of Florida at Gainesville, will feature Dr. Steven O. Schwartz, Associate Professor of Medicine at Northwestern University and Director of the Hematology Laboratories at the Hektoen Institute for Medical Research of the Cook County Hospital in Chicago, as the principal speaker. Assisting Dr. Schwartz in presenting the program will be Dr. John B. Ross, Medical Director of the Jacksonville Blood Bank in Jacksonville, Dr. Sanford A. Mullen, pathologist at St. Vincent's Hospital in Jacksonville, and Dr. Jacob Neber, hematologist at Mt. Sinai Hospital of Greater Miami, Miami Beach. Advance registration is requested as it is planned to distribute material prior to the course to those wishing to participate in this program. The registration fee is $25. A luncheon for the group will be held on Thursday with Dr. George T. Harrell Jr., Dean of the College of Medicine, as the guest speaker.

Schedule for Seminar on Hematology

THURSDAY, JUNE 20

9:00 Registration
9:30 Introductory Remarks: "The Role of Hematology as a Diagnostic and Therapeutic Discipline"—Dr. Schwartz
10:30 Recess
10:45 "The Diagnosis and Treatment of Hemolytic Anemia"—Dr. Neber
11:30 Recess
11:40 "Discussion of Illustrative Cases"—Dr. Schwartz
12:45 Luncheon
Guest Speaker: Dr. George T. Harrell Jr.
2:30 "Abnormal Hemoglobins"—Dr. Ross
3:15 Recess
3:25 "Discussion of Illustrative Cases"—Dr. Schwartz
4:15 Demonstration

FRIDAY, JUNE 21

9:30 "Discussion of Illustrative Cases"—Dr. Schwartz
10:10 "Plasma Proteins"—Dr. Ross
11:00 Recess
11:15 "The Sundberg Technique of Bone Marrow Aspiration"—Dr. Mullen
12:15 Demonstration
2:00 Panel Discussion: "Hematology and Its Relation to Diagnostic Medicine"
3:30 Recess
3:45 "Discussion of Illustrative Cases"—Dr. Schwartz

SATURDAY, JUNE 22

9:30 "Macroscopic Hematology: What One Should See Without a Microscope"—Dr. Schwartz
10:30 "Chemotherapy of Chronic Leukemia" Dr. Neber
11:15 Recess
11:30 Question and Answer Period—Dr. Schwartz

Annual Graduate Short Course June 24-28

The Twenty-Fifth Annual Graduate Short Course will again be presented this year by the Division of Postgraduate Education of the College of Medicine of the University of Florida, in cooperation with the Florida Medical Association and the Florida State Board of Health. The Short Course will be held the week of June 24-28 at the College of Medicine in Gainesville. The complete program together with a brochure containing information on travel, hotel, and recreational facilities will be mailed to all physicians in the state the latter part of May. Assistance in making hotel and travel arrangements may be secured by contacting the office of the Division of Postgraduate Education, 1625 Riverside Avenue, Jacksonville 4.

Tours of the College of Medicine will be ar-

Schedule for Short Course

	Monday June 24	Tuesday June 25	Wednesday June 26	Thursday June 27	Friday June 28
8:00	**Registration**				
9:00	**Medicine** "Diagnosis and Treatment of Angina Pectoris" Dr. Warren	**Medicine** "Differential Diagnosis of Diseases of the Lungs" Dr. Warren	**Pediatrics** "Cytomegalic Inclusion Disease of the Newborn" Dr. Birdsong	**Surgery** "Surgery of the Adrenal Glands" Dr. Cantrell	**Gynecology** "Management of Hydatidiform Mole and Chorioepithelioma" Dr. G. S. Jones
10:00	**Pediatrics** "Emergency Condition of the Newborn Infant" Dr. Birdsong	**Pediatrics** "The Care of Premature Infants" Dr. Birdsong	**Medicine** "Shortness of Breath" Dr. Warren	**Gynecology** "Cancer of the Cervix and Body of the Uterus" Dr. Jones	**Surgery** "The Use of Operative Cholangiography in Operations on the Gallbladder and Common Duct" Dr. Cantrell
11:00	**Recess**	**Recess**	**Recess**	**Recess**	**Recess**
11:30	**Laboratory Diagnostic Methods** "Cardiac Catheterization as a Diagnostic Aid" Dr. Otis	**Laboratory Diagnostic Methods** "Newer Methods for the Study of Proteins" Dr. Fried	**Laboratory Diagnostic Methods** "New Laboratory Diagnostic Methods for Parasites" Dr. Hunter	**Surgery** "Current Concepts of the Treatment of Portal Hypertension" Dr. Cantrell	**Gynecology** "Intersexuality and Allied Conditions" Dr. Jones
12:30	**Lunch**	**Lunch**	**Lunch**	**Lunch**	**Lunch**
2:00	**Pediatrics** "Infant Feeding" Dr. Birdsong	**Medicine** "Digitalis and Quinidine Therapy" Dr. Warren	**Medicine** "Edema" Dr. Warren	**Gynecology** "Diagnosis and Management of Infertility" Dr. G. S. Jones	**Surgery** "The Present Status of Appendicitis" Dr. Cantrell
3:00	**Recess**	**Recess**	**Recess**	**Recess**	**Recess**
3:15	**Medicine** "The Management of Congestive Heart Failure" Dr. Warren	**Medical Panel:** "Use and Abuse of New Therapeutic Agents" Drs. Warren, Birdsong, and Martin	**Pediatrics** "Congential Hemolytic Disease of the Newborn" Dr. Birdsong	**Surgery** "The Rational Treatment of Spontaneous Pneumothorax" Dr. Cantrell	**Surgical Panel** "Treatment of Cancer with Particular Reference to Radical Surgery" Drs. G. S. Jones, Jones and Cantrell
4:15	**Recess**		**Recess**	**Recess**	
4:30	**Laboratory Diagnostic Methods** "The Application of Phase Microscopy" Dr. Odor	Moderator: Dr. George T. Harrell Jr.	**Laboratory Diagnostic Methods** "Laboratory Isolation and Identification of Viruses" Dr. Gifford	**Gynecology** "Amenorrhea" Dr. Jones	Moderator: Dr. Thomas H. Bates
5:30			Cocktail Hour		

ranged so that the physicians in attendance will have an excellent opportunity to familiarize themselves with the new medical school.

The faculty is as follows:

Medicine: Dr. James V. Warren, Professor of Medicine, Duke University School of Medicine, Durham, N. C.

Pediatrics: Dr. McLemore Birdsong, Professor of Pediatrics, University of Virginia School of Medicine, Charlottesville, Va.

Gynecology: Dr. Howard W. Jones Jr., Assistant Professor of Gynecology, The Johns Hopkins University School of Medicine, Baltimore.

Dr. Georgeanna S. Jones, Staff Member, The Johns Hopkins Hospital, Baltimore.

Surgery: Dr. James R. Cantrell, Assistant Professor of Surgery, The Johns Hopkins University School of Medicine, Baltimore.

Laboratory Diagnostic Methods: College of Medicine Staff: Melvin Fried, Ph.D., Assistant Professor of Biochemistry; George Gifford, Ph.D., Assistant Professor of Microbiology; George W. Hunter III, Ph.D., Interim Professor of Biological Science; D. Louise Odor, Ph.D., Assistant Professor of Anatomy; and Arthur B. Otis, Ph.D., Professor and Head of the Department of Physiology.

Panels: Dr. George T. Harrell Jr., Dean, College of Medicine, University of Florida, Gainesville. Dr. Samuel P. Martin, Professor of Medicine, College of Medicine, University of Florida, Gainesville.

Florida Association of Blood Banks Eleventh Annual Meeting Miami Beach, May 10-12

Planned to follow immediately after the annual convention of the Florida Medical Association at the nearby Hollywood Beach Hotel, the Eleventh Annual Meeting of the Florida Association of Blood Banks will be held on Friday, Saturday and Sunday, May 10, 11 and 12 at the Golden Gate Hotel at 194th Street and Collins Avenue, Miami Beach. The excellent program with its nationally prominent speakers and their well chosen subjects should attract many physicians from throughout the state who will attend the Florida Medical Association meeting and who doubtless will wish to remain over for this meeting.

Paul R. Cannon, M.D., Professor of Pathology at the University of Chicago, the School of Medicine, and distinguished authority on protein metabolism and electrolyte balance, will be the principal guest speaker. He will speak on Saturday on "The Role of Amino Acids in the Maintenance of Life."

Among the eminent guest speakers is Eric E. Muirhead, M.D., of Dallas, President of the American Association of Blood Banks, whose subject is "Some Characteristics of Contaminated Blood." The other invited lecturers and their subjects are: Merlin L. Trumbull, M.D., Baptist Memorial Hospital, Memphis, "The Importance of a Code of Ethics in Blood Banking;" Coye C. Mason, M.D., Chicago, "Use of Reclaimed Plasma in Hospital Transfusion Services;" Lloyd R. Newhouser, M.D., John Elliott Blood Bank of Dade County, Miami, "Preliminary Report on Hemoglobin Levels in the Aged;" O. B. Hunter, M.D., Washington, D. C., "Use of Radio-Isotopes as Related to Blood Transfusions;" E. R. Jennings, M.D., Woman's Hospital, Detroit, "Studies in Hepatitis;" Joseph A. Hertel, M.D., Atlanta, "The Nature of the Red Cross Blood Programs in the United States;" Paul Cantor, M.D., L.L.B., Georgetown University School of Law and Medicine, Washington, D. C., "Medico-Legal Aspects of Blood Banking;" Mrs. Edna T. McPhee, John Elliott Blood Bank of Dade County, Miami, "Public Relations and Donor Procurement in Blood Banking;" and Mrs. Mary Rand, Central Florida Blood Bank, Orlando, "A Pension Plan for Blood Banks."

Medicolegal Institute Held

The Florida Medical Association, the Florida Bar and the University of Miami School of Law sponsored a medicolegal institute on March 22 and 23, 1957 at the McAllister Hotel in Miami. Dr. W. Tracy Haverfield of Miami, a member of the Public Relations Advisory Committee holding the special assignment of liaison officer with the Florida Bar, represented the Association in arranging for this unique and constructive program. A medical and a legal speaker discussed each subject. Each lecture period was half an hour in length and was followed by a half hour period of questions and answers.

Among the subjects discussed were: "Relationship of Cancer and Trauma," "Relationship of Trauma and Strain on the Heart and Vascular System," "Evaluating the Effects of Head Injury Using Psychometric Tests and EEG," "The Follow-Up of Whiplash Injuries After Settlement of the Case," "Soft Tissue Trauma," "Electromyography as an Aid in Evaluating Nerve and Muscle Injury," "Post-Traumatic Arthritis," "Back Injury—Its Cause and Sequelae" and "Disability Evaluation."

Food for Thought

At the beginning of each new session of the Congress, the Washington staff of the American Medical Association makes a practice of calling on all new congressmen. Two staff members, early in the present session, stopped in to chat with Congressman Dingell of Michigan, who succeeded his late father, a legislator all too well known to the medical profession for many years. They found him busy cutting and pasting a new bill.

"You gentlemen won't like what I'm doing," he said, "because I'm getting ready to reintroduce a new version of the old Wagner-Murray-Dingell bill." As he continued clipping, he observed, "The new bill is going to be much smaller than the one introduced the last time."

With that, he held up a substantial number of pages and dropped them in the wastebasket. "These items," he remarked, "have already been enacted."

This revealing conversation provides a bit of provocative information which should help to arouse the medical profession from its present apathy. Socialized medicine is by no means a dead issue. A timely warning was sounded by President Dwight H. Murray of the American Medical Association at the recent Seattle clinical meeting of that body. "Today," he said, "the medical profession along with business and industry is caught between those who desire to promote sound government and those who desire even more intensely to perpetuate party power. Unfortunately, in recent years a benevolent federal government appears more attractive to the voting public than the preservation of individual freedom. Medicine must do its utmost to reverse this trend."

"In my travels around the country as your representative the last 18 months, . . . " he continued, "I have seen too much complacency over governmental encroachment into medical affairs. And I am deadly serious when I say to you that apathy by the few, or by the many, can be detrimental to all.

"No nation can merely reap the benefits of freedom; it also must sow seeds of freedom.

"In medicine the situation is the same. If an apathetic medical profession takes its freedom for granted, it will be the beginning of the end. A strong, free profession must work for freedom so that it may live in freedom."

Dr. Murray's words of caution and his appeal for vigilance are definitely in order. They are also given unique emphasis by the pages of the old Wagner-Murray-Dingell bill, representing enacted items, which the new Congressman Dingell consigned to his wastebasket even as he prepared a new version of the obnoxious bill.

How Would You Improve The American Medical Association?

If you were the president of the American Medical Association, what changes would you make in the way it is run? Five hundred physicians were recently asked to suggest the changes they would recommend under such circumstances. Questioned in a nationwide survey, they most frequently called for closer ties with the individual physician and for further improvement in public relations.

Approximately one doctor in five thought the world's largest medical association should get closer to individual doctors, perhaps even poll their ideas on important subjects to get a more accurate indication of their thinking. A smaller number thought there should be a greater representation of young physicians within the organization.

Improvement in public relations and public information was second in importance among the changes suggested. Concentration on these areas was deemed advisable by 14 per cent of the doctors consulted in the survey.

Social security or pensions for doctors were cited by 9 per cent. About 5 per cent requested liberalized hospital affiliation requirements, and nearly the same number suggested higher standards for practice. Approximately one out of 20 also thought improvements should be made in the Journal of the American Medical Association.

It was the opinion of 3 per cent of the participants that opposition to government medicine should be strengthened by the association, and 2 per cent called for elimination of fee-splitting. Only 2 per cent suggested increased postgraduate training.

About one doctor in 10 thought the association needed no improvement, finding it satisfactory as it is. One wonders if these percentages would carry over to the state and county medical societies in Florida and elsewhere throughout the nation.

The One Hundred Sixth Annual Meeting of the American Medical Association is being held in New York City, June 3-7, 1957. The headquarters hotel is the Waldorf-Astoria. The Woman's Auxiliary is meeting in the Roosevelt Hotel.

OTHERS ARE SAYING

Editorial

The beginning of a new year brings many thoughts as to the future progress of the medical society and of the multiple problems that are always presenting themselves.

What subjects are paramount on the agenda for the year? What are our combined problems that we should try to remedy?

Do we need more physicians and if so, what type? Specialist, general practitioner, young well trained men or an older group? Should we as a society try to attract more physicians into our area by giving them a green light and a welcome hand or should we be a little less eager to entice new men into this area. We have over seventy physicians for our general population. Are we justified in recommending our area to new men when we know how low the patient-doctor ratio is. Should the county society receive them with open arms, or should we look the applications over with a more serious attitude. Shouldn't the admission to the county society be sought after and not pushed onto every new applicant. Admission to our society means that we have placed a stamp of approval on the new physicians. Certainly, somehow we should be given the opportunity and pleasure of seeing, knowing and observing the new applicant for a period of time. Isn't it also true that perhaps these new physicians would also like to observe us — our policy and practice, before becoming part of our organization.

Our first responsibility is to our patient and if our patients are to place any faith in us as an organized group of physicians, shouldn't we be able to say to them that this doctor is a member of our county society and that by being a member of our society, he practices good medicine; that he lives up to the standards of medicine practiced in our society and therefore is a well qualified individual to take care of their medical problem.

We as a group must set our goal high to continue to hold the respect and privileges that were given to us by our predecessors in the art of the practice of medicine.

The Bulletin, Sarasota County Medical Society
January, 1957

CLASSIFIED

Advertising rates for this column are $5.00 per insertion for ads of 25 words or less. Add 20c for each additional word.

INTERNIST: With 4 years practice. Board certified. 32 years old. Florida license. Licensed to use radioisotopes, seeks consultation or hospital type of practice. Not interested in "family type" house call practice. Protestant, married, Southerner. Write 69-220, P. O. Box 2411, Jacksonville, Fla.

WANTED: Physician with Florida license. Interest in Physical Medicine and Geriatrics. State qualifications in writing. The Miami-Battle Creek, Miami Springs, Fla.

CLINIC MANAGER: Position desired as manager of group clinic. Experience: auditing and hospital. Education: B. S. (Business Administration) and M.S. (Hospital Administration). Write 69-218, P.O. Box 2411, Jacksonville, Fla.

WANTED: Specialist in Obstetrics and Gynecology to associate with group in Dade-Broward area. Board man preferred. Write age, training, chronology of medical experience, reference. Write 69-222, P. O. Box 2411, Jacksonville, Fla.

INTERNIST (Cardiology): Desires association with established physician or group. Florida license. Diplomate. F. A. C. P. Middle aged. Protestant. Write 69-223 P. O. Box 2411, Jacksonville, Fla

FOR SALE: Doctor's handsome, gold custom made Nu Sigma Nu, ring with 1.5 Kt. diamond set in onyx; white gold crest. $1200. Also new Hamilton watch, $45.00. Write P.O. Box 1974, Orlando, Fla.

FOR SALE: One set trial lenses ophthalmoscope, McIntosh galvanic generator, Fischer Ultra sound M. 2500,-Tonsel instruments, OB bag with instruments, Dental forceps, instrument cabinet. Write S. A. Winsor, M.D., Box 6, Pompano Beach, Fla.

INTERNIST WANTED: Established certified internist desires associate. Florida license, certified or board eligible. Give full background in first letter. Write 69-224, P. O. Box 2411, Jacksonville, Fla.

OBSTETRICIAN-GYNECOLOGIST: Completing residency July 1957. Florida license. Family. Age 30. Category IV. Desires group practice or association. Write 69-225, P. O. Box 2411, Jacksonville, Fla.

PEDIATRICIAN: Board eligible. Florida license. University trained. Military obligations completed. Desires association with group of pediatricians (one to three). Available September 1, 1957. Age 30. Write 69-226, P. O. Box 2411, Jacksonville, Fla.

GENERAL PRACTITIONER WANTED: Will gamble that new medical building is ideal location. Rent absolutely free to right doctor for office and apartment until established, then reasonable. Write A. A. Edwards, 2030 Oak Terrace, Sarasota, Fla.

WANT TO BUY: Used binocular microscope suitable for medical student. Write 69-227, P. O. Box 2411, Jacksonville, Fla.

WANTED: Young energetic Internist with special interest in Gastroenterology to associate with established Internist in rapidly growing central Florida city. Excellent hospital facilities. Write 69-228, P. O. Box 2411, Jacksonville, Fla.

X-RAY EQUIPMENT: Used Keleket 200 MA, two tube, reconditioned and refinished. Carries new equipment guarantee. Includes new rotating anode tube. Call Keleket office — Miami-Tampa-Orlando-Jacksonville-West Palm Beach.

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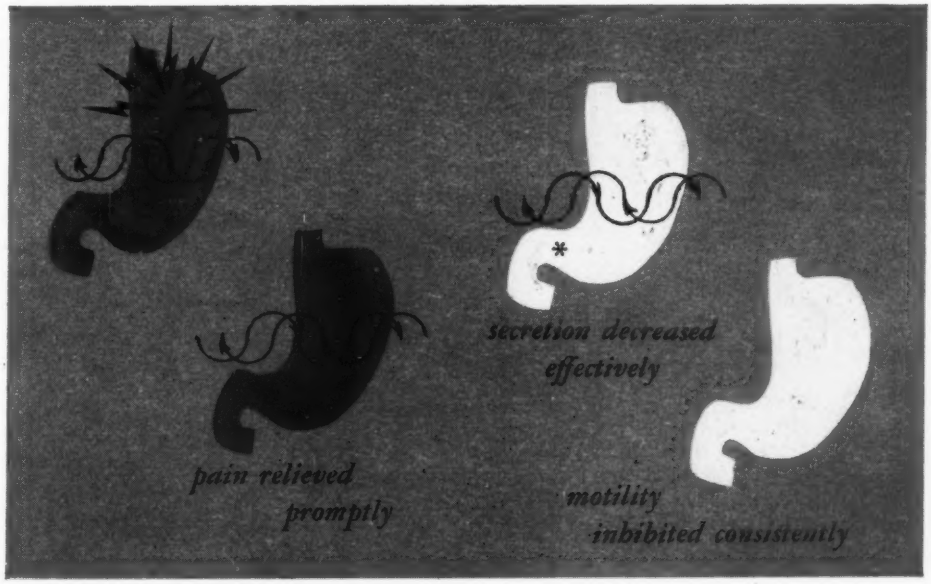

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The therapeutic utility and effectiveness of Pro-Banthine in the treatment of peptic ulcer are repeatedly confirmed in the medical literature. Dosage: One tablet with each meal and two tablets at bedtime. G. D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

*Lichstein, J.; Morehouse, M. G., and Osmon, K. L.: Pro-Banthine in the Treatment of Peptic Ulcer. A Clinical Evaluation with Gastric Secretory, Motility and Gastroscopic Studies. Report of 60 cases, Am. J. M. Sc. *232*:156 (Aug.) 1956.

SEARLE

STATE NEWS ITEMS

The Third Annual Central Florida Medical Meeting, sponsored by the Orange County Medical Society, was held at Orlando the middle of March with a total registration of 294. There were 191 physicians in the group.

Guest speakers included Dr. Robert H. Barter, Associate Professor of Obstetrics and Gynecology at the George Washington University School of Medicine, Washington, D. C.; Dr. Herbert D. Kerman, Daytona Beach, Consultant, Medical Division, Oak Ridge Institute of Nuclear Studies; Dr. Jack D. Myers, Professor of Medicine, University of Pittsburgh School of Medicine, Pittsburgh, Pa., and Dr. John T. Reynolds, Associate Professor of Surgery, University of Illinois College of Medicine, Chicago.

The meeting was begun with surgical clinics and a closed circuit television program originating at Orange Memorial Hospital. The program for the clinics included "Cholecystectomy," Dr. Harry H. Ferran; "Pedicle Graft," Dr. Joseph E. O'Malley; and "Vaginal Hysterectomy with Anterior and Posterior Repair," Dr. Chas. J. Collins. Drs. Ferran, O'Malley and Collins are from Orlando.

Following, Dr. James A. McLeod, Orlando, presented the film "Pancreatico-Duodenectomy" as a cine clinic in the San Juan Hotel, headquarters for the meeting.

The program then was given over to the guest speakers. Dr. Barter discussed "Minor and Office Gynecological Procedures;" Dr. Kerman, "The Clinical Status of Radioactive Isotopes;" Dr. Myers, "The Problem of Portal Hypertension," and Dr. Reynolds, "Obstructive or Surgical Jaundice."

Dr. Frank J. Pyle, president of the Orange County Medical Society, gave the address of welcome, and Dr. Oscar W. Freeman, Orlando, served as chairman of the Committee on Arrangements for the meeting.

The Sound-color film "Urine Sugar Analysis for Diabetics" developed in cooperation with the medical profession is available from the Ames Co., Inc., Elkhart, Ind.

It was prepared for use in the education of diabetic patients and shows the relationship between carbohydrates and insulin. It also explains the meaning of various diabetic conditions. The running time is approximately ten minutes.

Physicians may obtain the film through their local Ames representative.

Dr. Eugene Kellersberger of Melbourne was one of 12 Washington University alumni honored at the recent Founders' Day observance for "outstanding achievements and services which have reflected honor upon the University." Dr. Kellersberger, general secretary of the American Mission to Lepers, is the author of the reports on sleeping sickness which form the basic text for the study of this disease in medical schools.

Dr. Clyde O. Anderson of St. Petersburg has been selected to receive a distinguished alumni award from the University of Florida in recognition of his service to his community, his profession and to the alumni association. The award is to be presented Dr. Anderson at the June Commencement.

The Ninth Postgraduate Assembly in Endocrinology and Metabolism has been scheduled for October 21-25 at Augusta, Ga. The Assembly is sponsored by The Endocrine Society, The Medical

(Continued on page 1138)

CALIFORNIA CAREER OPPORTUNITIES FOR PHYSICIANS AND PSYCHIATRISTS. Employment available as a result of interview *only*. Assignments in State hospitals, juvenile and adult correctional facilities, or a veterans home. Three salary groups: $10,860-12,000; $11,400-12,600; $12,600-13,800. Salary increases being considered effective July 1957. Citizenship, possession of, or eligibility for California license required. Write Medical Recruitment Unit, Box A, State Personnel Board, 801 Capitol Avenue, Sacramento 14, California.

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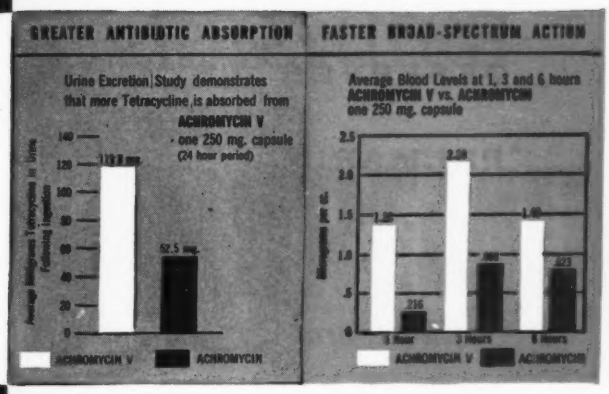

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(Continued from page 1134)

College of Georgia and The Medical College of Georgia Foundation.

The faculty will consist of 22 eminent clinicians and investigators in the fields of endocrinology and metabolism. The program will cover the various endocrinopathies, with emphasis on the clinical aspects, demonstration of laboratory tests, presentations of cases, and question and answer panel discussions. A syllabus with brief abstracts of lectures will be available to the registrants at the time of the Assembly.

The course has been approved by the American Academy of General Practice for 35 credit hours in Category 1.

For information write to Dr. Robert B. Greenblatt, Department of Endocrinology, Medical College of Georgia, Augusta.

Dr. George T. Harrell Jr. of Gainesville, Dean of the University of Florida College of Medicine, has been named "Man of the Year" by the student newspaper, The Alligator.

Dr. Alvan G. Foraker of Jacksonville has been appointed a member of the Advisory Cytology Committee of the Inter-Society Cytology Council by Dr. George N. Papanicolaou. The Committee, composed of cytologists from various parts of the country, is to plan and encourage research in cytology, and more efficient organization of laboratories engaged in cytologic diagnosis.

The Department of Otolaryngology, University of Illinois College of Medicine, has announced its Annual Assembly in Otolarngology to be held September 30 through October 6. The program will consist of an intensive series of lectures and panels concerning advancements in otolaryngology, and evening sessions devoted to surgical anatomy of the head and neck and histopathology of the ear, nose and throat.

Interested physicians should write direct to the Department of Otolaryngology, 1853 West Polk St., Chicago 12, Ill.

Dr. Seymour L. Alterman of Miami Beach has been certified by the American Board of Internal Medicine.

Dr. Lucien Y. Dyrenforth of Jacksonville has been elected president of the Atlantic Coast Line Railroad Surgeons Association.

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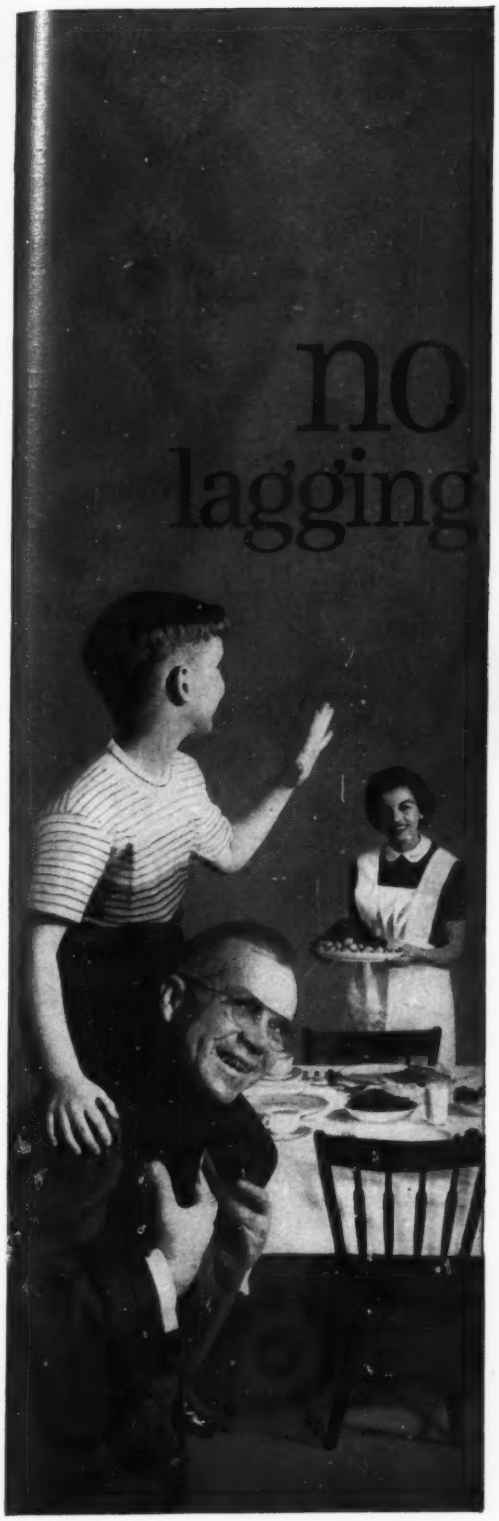

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The Sixth Annual Symposium for General Practitioners on tuberculosis and other chronic pulmonary diseases will be held in Saranac Lake, N. Y., July 8-12. It is approved for 26 hours of formal credit to members of the American Academy of General Practice. The registration fee is $40. Information and a copy of the program may be obtained from Dr. Henry W. Leetch, general chairman, Symposium for General Practitioners, P. O. Box 11, Saranac Lake, N. Y.

Dr. Hawley H. Seiler of Tampa announces the removal of his office to 517 Bayshore Boulevard, Tampa.

Dr. Frederick D. Droege of Sarasota discussed "The Importance of Allergy to the Otolaryngologist" at a meeting of the American College of Allergists held recently at Chicago.

Dr. Louis L. Amato of Fort Lauderdale has announced that the Fort Lauderdale Beach Hospital will admit its first patients on May 15. Facilities in the 100 bed institution have been keyed to the care of the chronically ill. Departments include radiology, dietetics, dentistry and occupational and physical therapy. An advertisement of the hospital is published in this issue of The Journal.

The Twenty-Third Annual Meeting of the American College of Chest Physicians will be held at the Hotel Commodore, New York City, May 29-June 2. The scientific program will include prominent speakers on all aspects of heart and lung diseases. In addition there will be a number of symposia, round table luncheon discussions, seminars and motion pictures.

A full day Cardiovascular Seminar is being held at Tampa, May 18 sponsored by the Hillsborough County Heart Association. Sessions begin at 9:00 a.m. and will be held in the Tampa Terrace Hotel. Participants include Drs. W. C. Sealy and Edward Orgain, of Duke University Hospital, Durham, N. C., and Dr. Michael DeBakey, Baylor University College of Medicine, Houston, Texas. There is no registration fee.

Dr. Hawley H. Seiler of Tampa participated in the recent 25th Annual Assembly of the Southeastern Surgical Congress held at St. Petersburg. The title of his presentation was "The Surgical Treatment of Pectus Excavatum."

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COMPONENT SOCIETY NOTES

Dade

National Medical Education Week was observed by the Dade County Medical Association with a program for the April meeting presented by the faculty of the University of Miami School of Medicine. The program was under the direction of Dr. Homer F. Marsh, Dean of the School of Medicine.

Duval

Dr. Samuel Proger, Physician-in-Chief at Pratt Diagnostic Clinic, Boston, and also Professor of Medicine at Tufts College Medical School, Boston, was principal speaker for the April meeting of the Duval County Medical Society. Dr. Proger discussed cardiac diseases with references to the doctor and the personal care of himself as it relates to cardiovascular diseases.

The program was under the direction of the Northeast Florida Heart Association. Invited guests were members of the county medical societies near Duval.

Hillsborough

Dr. Leo G. Rigler, Professor of Radiology at the University of Minnesota Medical School, Minneapolis, was principal speaker for the April meeting of the Hillsborough County Medical Association. The title of Dr. Rigler's address was "Roentgen Diagnosis of Heart Disease."

Jackson-Calhoun

The Jackson-Calhoun County Medical Society has paid 100 per cent of its state dues for 1957.

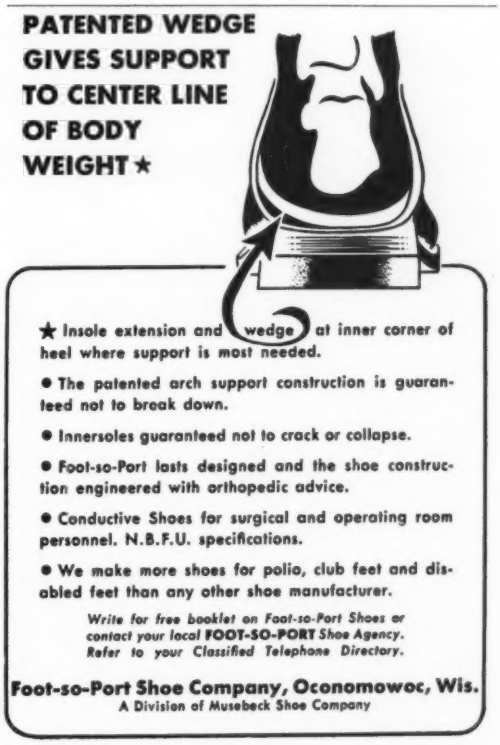
Dr. and Mrs. Jasper B. Dowling were hosts to the recent regular quarterly meeting of the Society in their home at Alliance. Members of the Woman's Auxiliary met jointly with the Society.

Lake

The March meeting of the Lake County Medical Society was held at Howey-in-the-Hills. Dr. John D. Bloom, Groveland, was program chairman and presented Dr. Lorant Forizs, Chief Psychiatrist at the Alcoholic Rehabilitation Center, Avon Park, and Dr. Hubert W. Coleman, also from Avon Park. Drs. Forizs and Coleman discussed chronic alcoholism and present day methods of management.

Pinellas

Dr. Louis H. Clerf was principal speaker at the April meeting of the Pinellas County Medical Society held at Madeira Beach. The title of his address was "History of Foreign Bodies in the Ear and Oral Passages."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Medical Licenses Granted

Dr. Homer L. Pearson Jr., secretary of the State Board of Medical Examiners, has reported that of the 314 applicants who took the examination of the Board, held November 25, 26, and 27, 1956, in Miami Beach, 222 passed and have been issued licenses to practice medicine in Florida. The names and addresses of the 222 successful applicants follow:

Adams, Charles Baird Jr., Miami (U Maryland 1952)
Aitelli, Ernest Charles Gregory, Newark, N. J. (Columbia 1948)
Albert, Harold Franklin, Miami (Geo. Washington 1954)
Allison, Ronald Eugene, Hollywood (Duke 1956)
Alper, Louis, Miami, (Wayne 1940)
Avant, Earl Stanley, Charleston, S. C. (South Carolina 1955)
Aye, Ralph Claxton, Evanston, Ill. (Geo. Washington 1950)
Azen, Norman Hillard, Lantana (U Pittsburgh 1952)
Banks, Keith Duane, Knoxville, Iowa (U Iowa 1951)
Becker, David Jerome, Miami (Harvard 1955)
Behr, Donald Jay, Brooklyn (Chicago 1953)
Berley, Ferdinand Victor, Jacksonville (Northwestern 1939)
Beychok, Irving Abraham, Lafayette, La. (Louisiana State 1949)
Bosniak, Morton Arthur, East Rockaway, N. Y. (New York U 1955)
Boyd, Eugene Judd, Dearborn, Mich. (U Iowa 1939)
Breslar, Elliott I., Miami Beach (Chicago 1956)
Carter, Howard Wesley, St. Petersburg (Queens 1933)
Cayia, Edward deRosier, Fort Lauderdale (Loyola 1948)
Cella, Charles Francis, Trenton, N. J. (Bellevue 1931)
Center, Sol, St. Louis (U Minnesota 1950)
Chapman, William Phalen, Boston (McGill 1938)
Cheslock, William Bernard, Key West (Jefferson 1954)
Chew, William, Orlando (S. E. Med. College, China 1941)
Chrysler, Charles Otis, Miami (Ohio State 1956)
Clayton, Orville Woolford, Birmingham, Ala. (Northwestern 1946)
Clevenger, Charles Edward, Miami (U Alabama 1956)
Clinton, Dale Leonard, Lakeland (U Kansas 1954)
Cobb, Sanford, Coral Gables (Albany 1951)
Cole, Walter Allen Jr., Jacksonville (U Louisville 1956)
Conlan, James Kenneth, Harlan, Ky. (U Louisville 1945)
Converse, John Gerard, Miami (Tufts 1943)
Cooper, Charles David, Alexandria, Va. (Geo. Washington 1951)
Cornett, Eugene Jones, Tampa (Duke 1949)
Costanza, Louis Carmine, Philadelphia (Jefferson 1952)
Covalt, Nila Kirkpatrick, Winter Park (Indiana 1933)
Crawford, John Patrick, Columbus, Ohio (Ohio State 1949)
Crumpacker, Edgar Lee, White Sulphur Springs, W. Va. (U Virginia 1942)
Culbertson, Eugene Carl, Pennington Gap, Va. (U Virginia 1955)
Damsey, Lloyd, Miami (U Buffalo 1955)
Daniel, Kearney Buell Jr., Miami (U Louisville 1956)
Davis, Donald James, Dedham, Mass. (Boston 1951)
Davis, Joseph Harrison, Miami (Long Island 1949)
Dayton, John Thomas, Miami (Ohio State 1956)
Dean, Harry Brooks, Norristown, Pa. (U Georgia 1944)
DeCenzo, Joseph Anthony, Miami (U Pittsburgh 1955)
deCiutiis, Vincent Louis, New York (New York 1948)
de Olazarra, Allen Charles, Coral Gables (U Illinois 1952)
de Victoria, William L., Miami Beach (Georgetown 1956)
Dobbrunz, Harry Curt, Hollywood (U Illinois 1955)
Dolce, Joseph Rocco, Buffalo (U. Buffalo 1931)
Duff, Roland DeWitt, Birmingham, Ala. (Alabama 1956)
Durlacher, Stanley Henry, Coral Gables (Yale 1938)
Edelstein, Jack Paul, Miami Beach (U Chicago 1956)
Edlund, Richard Allan, Miami (U Minnesota 1956)
Epes, Freeman, Atlanta, Ga. (Virginia 1956)

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1. Bodkin, L.G., and Ferguson, E.A., Jr.: Successful Ointment Therapy for Pruritus Ani, Am. J. Digest. Dis. 18:59 (Feb.) 1951.
2. Fromer, J.L.: Dermatologic Concepts and Management of Pruritus Ani, Am. J. Surg. 90:805 (Nov.) 1955.

Epps, Earle William, Staten Island, N. Y. (Albany 1950)
Eveloff, Herbert Hyman, Miami Beach (Temple 1956)
Faaland, Halvdan Gerhard Keyser, Jacksonville (Long Island 1943)
Faber, John Hubert, Gloversville, N. Y. (New York 1942)
Feuerman, Martin Norman, Miami Beach (New York 1956)
Fischbach, Karl, New York (U & Bellevue Hospital 1932)
Foertsch, Frederick Edward Jr., Dearborn, Mich. (Temple 1942)
Frankel George Jay, New York (Columbia 1950)
Gastring, Joseph Bennett, Yoakum, Texas (Baylor 1952)
Gevas, George, Baltimore (U Maryland 1953)
Gibby, John Francis, Miami (Geo. Washington 1954)
Gibson, Thomas Ashford, Huntsville, Ala. (Emory 1955)
Gilmore, Hugh Richmond III, Miami (U Pa. 1950)
Gladson, Noel Richard, Jacksonville (Javeriana 1950)
Goldman, Morris Eli, Hollywood (Tufts 1928)
Graden, Earl Alvin, East Point, Ga. (Temple 1953)
Graff, Harry Walter, Miami (U Illinois 1956)
Greenberg, Sigmund Robert, Philadelphia (Hahnemann 1956)
Griffin, Joseph Edward, Buffalo (U Buffalo 1949)
Grim, Kenneth Boyd, Charlottesville, Va. (U Virginia 1937)
Grogan, Robert Edward, West Palm Beach (U Louisville 1956)
Haeck, Alfons Josef, Orlando (U Bonn 1936)
Hale, Alfred Reece, New Orleans (Tulane 1956)
Halpern, Arthur Elliot, Miami (New York State 1954)
Hamilton, Catherine Latane, Augusta, Ga. (Women's M. C. of Pa. 1955)
Hanson, Eugene William, St. Petersburg (U Minnesota 1956)
Hartman, Howard Ernest, St. Louis (St. Louis 1951)
Hatton, Robert Lester, Miami (Tulane 1956)
Hess, Robert William, Miami (Tulane 1955)
Hieber, Robert Daniel, St. Petersburg (U Pittsburgh 1955)
Hill, Harold Donald, Jacksonville (U Virginia 1954)
Hoffman, William Henry, Charlottesville, Va. (Albany 1953)
Holley, John Calvert Jr., Jacksonville (Geo. Washington 1956)
Hoover, Richard Davis, Emory University, Ga. (U Oklahoma 1954)
Hopen, Joseph Martin, Miami (Jefferson 1949)
Horn, Paul Caughman, Miami (Jefferson 1956)
Hughes, Dixon Lee, North Miami Beach (Indiana 1954)
Hutchinson, William Mostyn, Jacksonville (Hahnemann 1948)
Hutson, Joe Darrel, Detroit (U Tenn. 1951)
Izumi, Ernest Matson, St. Petersburg (S. W. Div. U Texas 1950)
Jacobs, Walter Harvey, Brooklyn (Chicago 1954)
Jaffe, Robert Jay, Brooklyn (Hahnemann 1953)
Janulis, Alexander Theodore, Maplewood, N. J. (New York 1953)
Johnson, Hugh Wendell, Bradenton (U Tenn. 1956)
Jorgensen, Niels Bjorn Jr., North Hollywood, Calif. (Evangelists 1955)
Kantor, Norman, Miami (U Oklahoma 1955)
Kassels, Sidney Victor, Walnut Creek, Calif. (Middlesex 1943)
Kates, Matthew Forest (Col.), Fort Lauderdale, (Evangelists 1954)
Kaye, Bernard Louis, Savannah, Ga. (Harvard 1955)
Kelemen, William Arthur, Maple Heights, Ohio (Ohio State 1950)
Kellogg, Cal Stewart, Miami (Western Reserve 1946)
Kilgo, Frank DeWald, Columbus, Ga. (Emory 1955)
Kirker, Walter Robert, Key West (Temple 1954)
Koenig, James William, Tampa, (Ohio State 1954)
Lambert, Walter Renato, Daytona Beach (U Havana 1948)
Latty, Samuel George, Orlando (Duke 1949)
Lehman, John Ditter, Miami, (U Iowa 1956)
Lipton, Alan Alvin, New Orleans (Tulane 1951)
Lipton, Roger Andrew, Brooklyn (Syracuse 1932)
Litt, Richard Erwin, Miami (Alabama 1956)

Lakota, James Ernest, West Palm Beach (U Nebraska 1956)
MacCollum, Maxwell Speers, Indianapolis (Indiana 1956)
Magill, John Charles, St. Petersburg (Ohio State 1954)
Mahan, John William, Cincinnati (Northwestern 1951)
Mahon, Chester Wadsworth Jr., Tampa (Temple 1956)
Maren, Thomas Hartley, Gainesville (Johns Hopkins 1951)
Marks, Asher, Miami (Emory 1950)
Marquardt, Robert George, St. Petersburg (Cornell 1943)
Marquez, Antonio Higinio, Miami (U Havana 1950)
Masten, Mabel Garden, Miami (U Chicago 1925)
Mazursky, Milton Michael, Miami (New York 1945)
McConnell, Bright Jr., Augusta, Ga. (Georgia 1950)
McCrocklin, Kenneth Haller, Louisville, Ky. (U Louisville 1950)
McGrady, Charles Winfred Jr., Miami (U Maryland 1951)
Medow, Aaron, Miami Beach (Hahnemann 1956)
Mendenhall, Charles Lee, Columbus, Ga. (U Nebraska
Miller, Robert Allen, Coral Gables (Geo. Washington 1956)
Miller, William Henry Jr., Orlando (U Pittsburgh 1943) 1956)
Mitnick, Stanley Marvin, Miami Beach (Hahnemann 1956)
Molina, Antonio Eduardo, Miami (Hahnemann 1943)
Montgomery, Charles Ellsworth, Roswell, N. M. (U Kansas 1944)
Morgan, Leslie Aaron, Miami (U Louisville 1955)
Morgan, Philander Dean, Birmingham, Ala. (Alabama 1950)
Mozen, Herschel Eugene, Euclid, Ohio (Western Reserve 1949)
Murphy, William Parry Jr., Miami (U Illinois 1947)
Nassef, George Joseph, West Palm Beach (Jefferson 1948)
Needell, Stanley Stuart, Miami (U Virginia 1956)
Newbill, Cannon Erby Jr., Jacksonville (U Tenn. 1955)
Newhall, Joseph Frank Paul Jr., Winter Park (Tulane 1955)
Norris, Franklin Gray, Winston-Salem, N.C. (Harvard 1951)
Orlick, Abraham Pierpont, Miami Beach (Long Island 1922)
Overman, Robert Lee, Pensacola (Temple 1950)
Palmieri, Anthony Gerard, Shaker Heights, Ohio (St. Louis 1937)
Palmisano, Peter John, Ben's Lake, Eglin AFB, (U Vermont 1954)
Paloucek, Frank Paul, McHenry, Ill. (U Illinois 1947)
Parker, James William, Bartow (U Oklahoma 1946)
Parsons, Robert Lee, Orlando (Tulane 1955)
Pasternack, Frederick Oliver, Miami (Columbia 1956)
Peck, Earl Masters, Key Biscayne (Virginia 1937)
Perkoff, Morton William, Collingswood, N. J. (Hahnemann 1955)
Perry, James Boyce, St. Petersburg (Marquette 1956)
Petkas, Nicholas Steven, Fort Bragg, N.C. (Emory 1954)
Pippin, Earl Cranston Jr., Tampa (U Tenn. 1953)
Piver, Julius Samuel, Washington, D. C. (Geo. Washington 1952)
Plum, George Elwood, Rochester, Minn. (Harvard 1951)
Podis, Alan David, Cleveland, Ohio (Western Reserve 1956)
Poske, Robert Martin, Hines, Ill. (Northwestern 1948)
Provo, Wilford Morris, Tampa (U Tenn. 1956)
Ptomey, William Reagan, Century (Tulane 1956)
Rawlings, Frederick Painter Jr., Winter Haven (Vanderbilt 1944)
Raynak, Frank Raymond, Rochester, Minn. (Temple 1947)
Reynolds, Georgia, Plantation (U Maryland 1951)
Rhodes, Jordan Maynard, Chicago (Chicago 1955)
Robinson, Alan Saul, Jamaica, N.Y. (Cornell 1950)
Rodenberg, Thomas Alfred, Buffalo (U Buffalo 1951)
Rosenstein, Ira Nathaniel, Miami Beach (New York 1956)
Russell, Anne Patras, Miami (Loyola 1941)
Russell, Theodore Albert, Cleveland (Western Reserve 1956)

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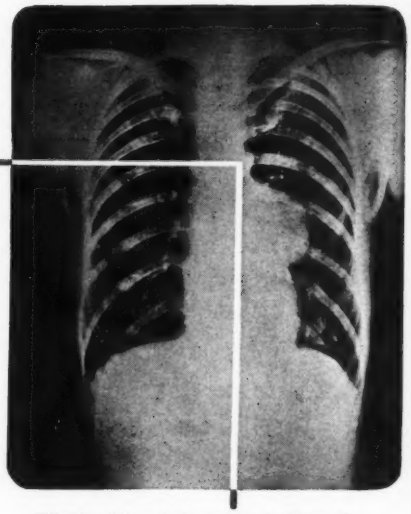

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Salina, Richard James, Fort Walton Beach (U Pittsburg 1954)
Schatzki, Peter Ferdinand, Bristol, Conn. (Tufts 1952)
Schaifer, Donald Muskat, Chicago (U Illinois 1953)
Schaoer, Harry August, Lantana (Cornell 1945)
Schaltz, Gerald Ted, St. Petersburg (U Iowa 1956)
Schaltz, Lester Jacob, New York (U Lausanne 1942)
Scott, Edwin Paul, Venice (U Louisville 1940)
Seda-Morales, Ruben, Bradenton (Hahnemann 1946)
Segal, Myron Irving, Miami Beach (McGill 1949)
Serrano, Mario Edward, New Orleans (Tulane 1956)
Sher, David Daniel, North Miami Beach, (Boston 1934)
Sherman, Charles Russell, Arabi, La. (Tulane 1942)
Sherrill, Robert Grady Jr., Lakeland (U Tenn, 1955)
Shuttleworth, John Elmer Samuel, Clearwater (Hahnemann 1944)
Sigal, Howard Marvin, Akron, Ohio (Ohio State 1954)
Silver, Bernd, Miami (U Louisville 1956)
Smith, George Franklin, Miami (Georgetown 1953)
Smith, Richard Lee, Miami (U Cincinnati 1953)
Smith, Stuart Cameron, DeLand (Duke 1947)
Sneider, Stanley Eugene, Laurelton, N.Y. (New York 1955)
Soma, Edward David, Miami (Georgetown 1956)
Sommer, Leonard Samuel, Miami (Columbia 1947)
Speed, Louis Elliott, Shawnee, Okla. (Vanderbilt 1951)
Spindell, Edward, Rantoul, Ill. (Boston 1953)
Stephenson, Charles Martin, Miami (Evangelists 1956)
Szawlowski, Matthew Walter, Miami (U Buffalo 1956)
Terris, Gerald, Miami (Boston 1952)
Thabit, George Jr., Opa Locka (Tulane 1955)
Thompson, Jasper Fritz III, Martinsburg, W. Va. (Emory 1955)
Thompson, Oscar William Jr., Ellington AFB, Texas (U Louisville 1955)
Thompson, William West, Eglin AFB, (Duke 1947)
Tocci, Frank Paul, Montclair, N.J. (Hahnemann 1940)
Torres, Joseph, Jacksonville (Georgetown 1955)
Travis, Burton Lester, New York (Duke 1952)
Trombley, Joseph Jerome Jr., Detroit (U Michigan 1925)
Turner, Thomas Alexander, Orlando (Tufts 1953)
Van Alstyne, Walter Kent, St. Petersburg (Albany 1926)
Waldheim, Hugo Jr., Birmingham, Ala. (Alabama 1956)
Walls, Fred Jr., Richmond, Va. (Virginia 1947)
Watson, Hugh Alfred, Greensboro, N.C. (Virginia 1930)
Webb, Edgar William, Dearborn, Mich. (Marquette 1951)
Weiner, Harold Henry, Eatontown, N.J. (Kansas City 1941)
Weisman, Joseph Charles, Kew Gardens, N.Y. (Geo. Washington 1930)
Wendland, Robert Paul, Elgin, Ill. (Northwestern 1950)
White, Grover Watts, Jacksonville (Alabama 1956)
White, Joseph William, Fort Lauderdale (Jefferson 1926)
Whitehurst, William Laney, Jacksonville (U Tenn. 1934)
Williams, Robert Murray, Miami (Indiana 1956)
Wolf, Robert Lawrence, New York (Duke 1952)

BOOKS RECEIVED

The Philosophy of Medicine. By William R. Laird, M.D. Pp. 64. Price, $3.00. Charleston, West Virginia, Education Foundation, Inc., 1956.

"Every thinking person develops a philosophy of life and conduct," comments the author of this little volume. "Like all physicians I have developed a philosophy of medicine. It has engaged my thinking over all my years of activity and I have discussed it at some length with many successive groups of Surgical Residents. One after another has asked for copies of the notes." In consequence, this philosophy is here set forth in short essays covering the five fields of study that philosophy includes — logic, esthetics, ethics, politics, and metaphysics—all of which have a rightful place in medicine.

In his review of this book, Dr. Paul R. Hawley, Director of the American College of Surgeons, observed, "Fortunate the interne and resident exposed to such philosophy while perfecting his technical skill."

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The newborn may become a feeding problem if the prescribed formula is excessive or the feeding schedule rigid. Every time he is awakened abruptly from satisfying slumber to be fed forcefully, the baby gradually loses his enthusiasm for the food and begins to resist the feeding. The young infant may balk at the crude introduction of a new food or feeding procedure without the proper prelude of gradual adaptation of taste, color, consistency and quantity.

The older infant weaned from bottle to cup may reject milk or go on a hunger strike. Devoted to his bottle he resents its sudden deprivation. It takes a certain readiness for weaning to make that change agreeable. Later the infant becomes somewhat independent of his mother and arbitrary with his food. What he enjoyed yesterday, he rejects today. If he distorts the diet for a day and his mother resorts to force, a feeding problem is in the making. Sensible decorum will solve these little difficulties before they become big behavior disturbances in childhood.

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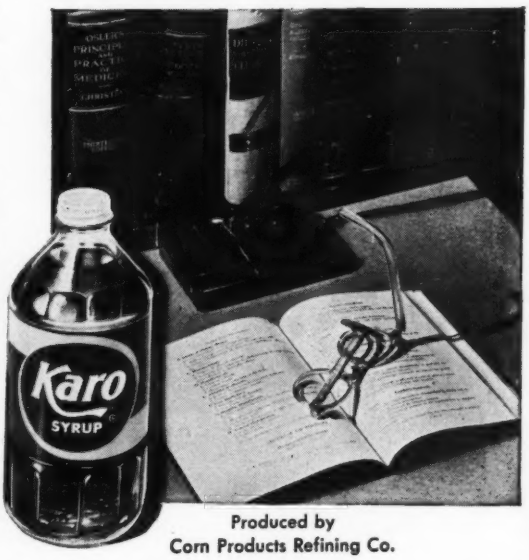

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By 17 Authorities. Edited by Theodore Fields, M.S., Assistant Director Radioisotope Laboratory, VA Hospital, Hines, Illinois, and Lindon Seed, M.D., Clinical Associate Professor of Surgery, College of Medicine, University of Illinois. 384 pages; illustrated. $9.50.

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Mrs. Perry D. Melvin
1957-58 President Of Auxiliary

At the annual meeting of the Woman's Auxiliary to the Florida Medical Association held at the Hollywood Beach Hotel on May 6, Mrs. Perry D. Melvin was installed as president of the Auxiliary for the 1957-58 term.

Mrs. Melvin, known to all her friends as Judy—short for Judith, was born and reared in New Orleans, La., where she attended school and was graduated from Sophie Newcomb College. While Dr. Melvin was interning in the Panama Canal Zone they were married and later lived in Philadelphia where he was a resident in urology. The Melvins came to Miami in 1940 and have been in that city since that time.

Mrs. Melvin has served as President of the Woman's Auxiliary to the Dade County Medical Association in 1947-48, and in addition in practically every other capacity. She is the Councilor for the Woman's Auxiliary to the Southern Medical Association and previously served two years as Chairman of the Jane Todd Crawford Loan Scholarship Fund Committee for that Auxiliary.

(Continued on page 1158)

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